

ARCH CAPITAL GROUP LTD.
Form 10-K
February 26, 2010

Table of Contents

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2009

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934**

**For the transition period from _____ to _____
Commission File No. 0-26456**

ARCH CAPITAL GROUP LTD.

(Exact name of registrant as specified in its charter)

Bermuda

(State or other jurisdiction of
incorporation or organization)

Not applicable

(I.R.S. Employer
Identification No.)

**Wessex House, 45 Reid Street
Hamilton HM 12, Bermuda**

(Address of principal executive offices)

(441) 278-9250

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class
Common Shares, \$0.01 par value per share
8.000% Non-Cumulative Preferred Shares, Series A, \$0.01
par value per share
7.875% Non-Cumulative Preferred Shares, Series B, \$0.01
par value per share

Name of each exchange on which registered
NASDAQ Stock Market (Common Shares)
New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Exchange Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes No

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates, computed by reference to the closing price as reported by the NASDAQ Stock Market as of the last business day of the Registrant's most recently completed second fiscal quarter, was approximately \$3.09 billion.

As of February 23, 2010, there were 52,909,248 of the registrant's common shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Part III and Part IV incorporate by reference our definitive proxy statement for the 2010 annual meeting of shareholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A before April 30, 2010.

Table of Contents

**ARCH CAPITAL GROUP LTD.
TABLE OF CONTENTS**

Item		Page
	<u>PART I</u>	
<u>ITEM 1.</u>	<u>BUSINESS</u>	<u>1</u>
<u>ITEM 1A.</u>	<u>RISK FACTORS</u>	<u>39</u>
<u>ITEM 1B.</u>	<u>UNRESOLVED STAFF COMMENTS</u>	<u>63</u>
<u>ITEM 2.</u>	<u>PROPERTIES</u>	<u>63</u>
<u>ITEM 3.</u>	<u>LEGAL PROCEEDINGS</u>	<u>64</u>
<u>ITEM 4.</u>	<u>SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS</u>	<u>64</u>
	<u>PART II</u>	
<u>ITEM 5.</u>	<u>MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES</u>	<u>64</u>
<u>ITEM 6.</u>	<u>SELECTED FINANCIAL DATA</u>	<u>67</u>
<u>ITEM 7.</u>	<u>MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.</u>	<u>69</u>
<u>ITEM 7A.</u>	<u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	<u>123</u>
<u>ITEM 8.</u>	<u>FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA</u>	<u>123</u>
<u>ITEM 9.</u>	<u>CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE</u>	<u>123</u>
<u>ITEM 9A.</u>	<u>CONTROLS AND PROCEDURES</u>	<u>123</u>
<u>ITEM 9B.</u>	<u>OTHER INFORMATION</u>	<u>124</u>
	<u>PART III</u>	
<u>ITEM 10.</u>	<u>DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE</u>	<u>124</u>
<u>ITEM 11.</u>	<u>EXECUTIVE COMPENSATION</u>	<u>124</u>
<u>ITEM 12.</u>	<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS</u>	<u>124</u>
<u>ITEM 13.</u>	<u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.</u>	<u>125</u>
<u>ITEM 14.</u>	<u>PRINCIPAL ACCOUNTANT FEES AND SERVICES.</u>	<u>125</u>
	<u>PART IV</u>	
<u>ITEM 15.</u>	<u>EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.</u>	<u>125</u>

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 ("PLSRA") provides a "safe harbor" for forward-looking statements. This report or any other written or oral statements made by or on behalf of us may include forward-looking statements, which reflect our current views with respect to future events and financial performance. All statements other than statements of historical fact included in or incorporated by reference in this report are forward-looking statements. Forward-looking statements, for purposes of the PLSRA or otherwise, can generally be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue" and similar statements of a future or forward-looking nature or their negative or variations or similar terminology.

Forward-looking statements involve our current assessment of risks and uncertainties. Actual events and results may differ materially from those expressed or implied in these statements. Important factors that could cause actual events or results to differ materially from those indicated in such statements are discussed below, elsewhere in this report and in our periodic reports filed with the Securities and Exchange Commission ("SEC"), and include:

our ability to successfully implement our business strategy during "soft" as well as "hard" markets;

acceptance of our business strategy, security and financial condition by rating agencies and regulators, as well as by brokers and our insureds and reinsureds;

our ability to maintain or improve our ratings, which may be affected by our ability to raise additional equity or debt financings, by ratings agencies' existing or new policies and practices, as well as other factors described herein;

general economic and market conditions (including inflation, interest rates, foreign currency exchange rates and prevailing credit terms) and conditions specific to the reinsurance and insurance markets in which we operate;

competition, including increased competition, on the basis of pricing, capacity, coverage terms or other factors;

developments in the world's financial and capital markets and our access to such markets;

our ability to successfully integrate, establish and maintain operating procedures (including the implementation of improved computerized systems and programs to replace and support manual systems) to effectively support our underwriting initiatives and to develop accurate actuarial data;

the loss of key personnel;

the integration of businesses we have acquired or may acquire into our existing operations;

accuracy of those estimates and judgments utilized in the preparation of our financial statements, including those related to revenue recognition, insurance and other reserves, reinsurance recoverables, investment valuations, intangible assets, bad debts, income taxes, contingencies and litigation, and any determination to use the deposit method of accounting, which for a relatively new insurance and reinsurance company, like our company, are even more difficult to make than those made in a mature company since relatively limited historical information has been reported to us through December 31, 2009;

greater than expected loss ratios on business written by us and adverse development on claim and/or claim expense liabilities related to business written by our insurance and reinsurance subsidiaries;

Table of Contents

severity and/or frequency of losses;

claims for natural or man-made catastrophic events in our insurance or reinsurance business could cause large losses and substantial volatility in our results of operations;

acts of terrorism, political unrest and other hostilities or other unforecasted and unpredictable events;

losses relating to aviation business and business produced by a certain managing underwriting agency for which we may be liable to the purchaser of our prior reinsurance business or to others in connection with the May 5, 2000 asset sale described in our periodic reports filed with the SEC;

availability to us of reinsurance to manage our gross and net exposures and the cost of such reinsurance;

the failure of reinsurers, managing general agents, third party administrators or others to meet their obligations to us;

the timing of loss payments being faster or the receipt of reinsurance recoverables being slower than anticipated by us;

our investment performance, including legislative or regulatory developments that may adversely affect the market value of our investments;

material differences between actual and expected assessments for guaranty funds and mandatory pooling arrangements;

changes in accounting principles or policies or in our application of such accounting principles or policies;

changes in the political environment of certain countries in which we operate or underwrite business;

statutory or regulatory developments, including as to tax policy and matters and insurance and other regulatory matters such as the adoption of proposed legislation that would affect Bermuda-headquartered companies and/or Bermuda-based insurers or reinsurers and/or changes in regulations or tax laws applicable to us, our subsidiaries, brokers or customers; and

the other matters set forth under Item 1A "Risk Factors", Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other sections of this Annual Report on Form 10-K, as well as the other factors set forth in Arch Capital Group Ltd.'s other documents on file with the SEC, and management's response to any of the aforementioned factors.

All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with other cautionary statements that are included herein or elsewhere. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Table of Contents

PART I

ITEM 1. BUSINESS

As used in this report, references to "we," "us," "our" or the "Company" refer to the consolidated operations of Arch Capital Group Ltd. ("ACGL") and its subsidiaries. Tabular amounts are in U.S. Dollars in thousands, except share amounts, unless otherwise noted. We refer you to Item 1A "Risk Factors" for a discussion of risk factors relating to our business.

OUR COMPANY

General

Arch Capital Group Ltd. is a Bermuda public limited liability company with approximately \$4.7 billion in capital at December 31, 2009 and, through operations in Bermuda, the United States, Europe and Canada, writes insurance and reinsurance on a worldwide basis. While we are positioned to provide a full range of property and casualty insurance and reinsurance lines, we focus on writing specialty lines of insurance and reinsurance.

We launched an underwriting initiative in October 2001 to meet current and future demand in the global insurance and reinsurance markets. Since that time, we have attracted a proven management team with extensive industry experience and enhanced our existing global underwriting platform for our insurance and reinsurance businesses. It is our belief that our underwriting platform, our experienced management team and our strong capital base that is unencumbered by significant pre-2002 risks have enabled us to establish a strong presence in the insurance and reinsurance markets. For 2009, we wrote \$2.76 billion of net premiums and reported net income available to common shareholders of \$851.1 million. Diluted book value per share was \$73.01 at December 31, 2009, compared to \$51.36 per share at December 31, 2008.

ACGL's registered office is located at Clarendon House, 2 Church Street, Hamilton HM 11, Bermuda (telephone number: (441) 295-1422), and its principal executive offices are located at Wessex House, 45 Reid Street, Hamilton HM 12, Bermuda (telephone number: (441) 278-9250). ACGL makes available free of charge through its website, located at <http://www.archcapgroup.bm>, its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The public may read and copy any materials ACGL files with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC (such as ACGL) and the address of that site is <http://www.sec.gov>.

Our History

ACGL was formed in September 2000 and became the sole shareholder of Arch Capital Group (U.S.) Inc. ("Arch-U.S.") pursuant to an internal reorganization transaction completed in November 2000, as described below. Arch-U.S. is a Delaware company formed in March 1995 under the original name of "Risk Capital Holdings, Inc.," which commenced operations in September 1995 following the completion of an initial public offering. From that time until May 2000, Arch-U.S. provided reinsurance and other forms of capital for insurance companies through its wholly owned subsidiary, Arch Reinsurance Company ("Arch Re U.S."), a Nebraska corporation formed in 1995 under the original name of "Risk Capital Reinsurance Company."

On May 5, 2000, Arch-U.S. sold the prior reinsurance operations of Arch Re U.S. to White Mountains Reinsurance Company of America ("WTM Re"), formerly known as Folksamerica

Table of Contents

Reinsurance Company, in an asset sale, but retained its surplus and U.S.-licensed reinsurance platform. The sale was precipitated by, among other things, losses on the reinsurance business of Arch Re U.S. and increasing competition, which had been adversely affecting the results of operations and financial condition of Arch Re U.S. The WTM Re transaction, which resulted from extensive arm's length negotiation, was structured as a transfer and assumption agreement (and not as reinsurance) and, accordingly, the loss reserves (and any related reinsurance recoverables) related to the transferred business are not included in the balance sheet of Arch Re U.S. However, in the event that WTM Re refuses or is unable to make payment of claims on the reinsurance business assumed by it in the May 2000 sale and the notice given to reinsureds is found not to be an effective release by such reinsureds, Arch Re U.S. would be liable for such claims. In addition, Arch Re U.S. retained all liabilities not assumed by WTM Re, including all liabilities not arising under reinsurance agreements transferred to WTM Re in the asset sale. On November 8, 2000, following the approval by Arch-U.S.'s shareholders, Arch-U.S. completed an internal reorganization that resulted in Arch-U.S. becoming a wholly owned subsidiary of ACGL.

During the period from May 2000 through the announcement of our underwriting initiative in October 2001, we built and acquired insurance businesses that were intended to enable us to generate both fee-based revenue (e.g., commissions and advisory and management fees) and risk-based revenue (i.e., insurance premium). As part of this strategy, we built an underwriting platform that was intended to enable us to maximize risk-based revenue during periods in the underwriting cycle when we believed it was more favorable to assume underwriting risk. In October 2001, we concluded that underwriting conditions favored dedicating our attention exclusively to building our insurance and reinsurance businesses.

The development of our underwriting platform included the following steps: (1) after the completion of the WTM Re asset sale, we retained our U.S.-licensed reinsurer, Arch Re U.S., and Arch Excess & Surplus Insurance Company ("Arch E&S"), currently an approved excess and surplus lines insurer in 47 states and the District of Columbia and an admitted insurer in one state; (2) in May 2001, we formed Arch Reinsurance Ltd. ("Arch Re Bermuda"), our Bermuda-based reinsurance and insurance subsidiary; (3) in June 2001, we acquired Arch Risk Transfer Services Ltd., which included Arch Insurance Company ("Arch Insurance"), currently an admitted insurer in 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and Guam with a branch office in Canada, and rent-a-captive and other facilities that provide insurance and alternative risk transfer services; (4) in February 2002, we acquired Arch Specialty Insurance Company ("Arch Specialty"), currently an approved excess and surplus lines insurer in 49 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands and an admitted insurer in one state; (5) in June 2003, we acquired Arch Indemnity Insurance Company ("Arch Indemnity"), an admitted insurer in 49 states and the District of Columbia; (6) in May 2004, our London-based subsidiary, Arch Insurance Company (Europe) Limited ("Arch Insurance Company Europe"), was approved by the Financial Services Authority in the U.K. to commence insurance underwriting activities and began writing a range of specialty commercial lines in Europe and the U.K. during the 2004 third quarter; (7) in January 2005, Arch Insurance received its federal license to commence underwriting in Canada and began writing business in the first quarter of 2005; and (8) in November 2006, Arch Reinsurance Ltd., Hamilton (Bermuda), European Branch Zurich ("Arch Re Bermuda Swiss Branch"), the Swiss branch of Arch Re Bermuda, was registered with the commercial register of the Canton of Zurich to commence reinsurance underwriting activities in Switzerland. All liabilities arising out of the business of Arch Specialty and Arch Indemnity prior to the closing of our acquisitions of such companies were reinsured and guaranteed by the respective sellers, Sentry Insurance a Mutual Company ("Sentry") and Protective Life Corporation and certain of its affiliates.

In 2007, we (1) formed Arch Re Accident & Health ApS ("Arch Re Denmark"), a Danish underwriting agency which conducts accident and health underwriting as a branch office of Arch

Table of Contents

Reinsurance Europe Underwriting Limited ("Arch Re Europe"), which was formed in 2008 and is described below; (2) acquired the assets of Wexford Underwriting Managers, Inc., a managing general agent, to write excess workers' compensation and employers' liability insurance, a new line of business for us at the time; and (3) launched our property facultative reinsurance underwriting operations which are headquartered in Farmington, Connecticut. On January 22, 2008, Arch Re Bermuda and Gulf Investment Corporation GSC ("GIC") entered into a joint venture agreement for the purpose of forming a reinsurance company in the Dubai International Financial Centre. GIC is owned equally by the six member states of the Gulf Cooperation Council ("GCC"), which include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. In May 2008, we provided \$100.0 million of funding to Gulf Reinsurance Limited ("Gulf Re"), a newly formed reinsurer based in the Dubai International Financial Centre, pursuant to the joint venture agreement with GIC. Gulf Re provides property and casualty reinsurance primarily in the member states of the GCC.

In 2008, we expanded our underwriting platform by forming Arch Re Europe, an Irish company based in Dublin which was authorized by the Irish Financial Services Regulatory Authority in October 2008 to underwrite reinsurance and in November 2009 to underwrite life reinsurance. The operations of Arch Re Bermuda Swiss Branch were transferred to the Swiss branch of Arch Re Europe called Arch Reinsurance Europe Underwriting Limited, Dublin (Ireland), Zurich Branch ("Arch Re Europe Swiss Branch"). Arch Re Europe Swiss Branch commenced underwriting from the date of transfer in late 2008. Arch Re Bermuda Swiss Branch was de-registered as a branch in early 2009. In 2009, we received approval from the Lloyd's Franchise Board and the Financial Services Authority in the United Kingdom to establish a managing agent and syndicate at Lloyd's of London ("Lloyd's"). Our new Lloyd's syndicate 2012 ("Arch Syndicate 2012") commenced underwriting in the second quarter of 2009. Arch Underwriting at Lloyd's (Australia) Pty Ltd ("AUAL Australia"), based in Sydney, Australia, and Arch Underwriting at Lloyd's (South Africa) (Pty) Limited ("AUAL South Africa"), based in Johannesburg, South Africa, were each formed in 2009 as services companies to underwrite on behalf of Arch Syndicate 2012. AUAL Australia commenced operations in the 2009 fourth quarter, and AUAL South Africa is expected to commence operations in the 2010 first quarter.

The growth of our insurance and reinsurance platforms was supported through the net proceeds of: (1) an equity capital infusion of \$763.2 million led by funds affiliated with Warburg Pincus LLC ("Warburg Pincus funds") and Hellman & Friedman LLC ("Hellman & Friedman funds") in late 2001; (2) a public offering of 7,475,000 of our common shares with net proceeds of \$179.2 million in April 2002; (3) the exercise of class A warrants by our principal shareholders and other investors in September 2002, which provided net proceeds of \$74.3 million; (4) a March 2004 public offering of 4,688,750 of our common shares with net proceeds of \$179.3 million; (5) a May 2004 public offering of \$300.0 million principal amount of our 7.35% senior notes due May 2034 with net proceeds of \$296.4 million, of which \$200.0 million was used to repay all amounts outstanding under our existing credit facility; (6) a February 2006 public offering of \$200.0 million of our 8.00% series A non-cumulative preferred shares with a liquidation preference of \$25.00 per share with net proceeds of \$193.5 million; and (7) a May 2006 public offering \$125.0 million of our 7.875% series B non-cumulative preferred shares with a liquidation preference of \$25.00 per share with net proceeds of \$120.9 million.

In November 2009, the board of directors of ACGL authorized the investment of up to an additional \$1.0 billion in ACGL's common shares through a share repurchase program. Repurchases under this authorization may be effected from time to time in open market or privately negotiated transactions through December 31, 2011. The board of directors of ACGL had previously authorized the investment of up to \$1.5 billion in ACGL's common shares. During 2009, ACGL repurchased 6.7 million common shares for an aggregate purchase price of \$458.4 million. Since the inception of the share repurchase program in February 2007 through December 31, 2009, ACGL has repurchased approximately 22.0 million common shares for an aggregate purchase price of \$1.51 billion.

Table of Contents

Operations

We classify our businesses into two underwriting segments, insurance and reinsurance. For an analysis of our underwriting results by segment, see note 3, "Segment Information," of the notes accompanying our consolidated financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations Results of Operations."

Our Insurance Operations

Our insurance operations are conducted in Bermuda, the United States, Europe, Canada, Australia and South Africa. Our insurance operations in Bermuda are conducted through Arch Insurance (Bermuda), a division of Arch Re Bermuda, which has an office in Hamilton, Bermuda. In the U.S., our insurance group's principal insurance subsidiaries are Arch Insurance, Arch E&S, Arch Specialty and Arch Indemnity. Arch Indemnity is not currently writing business. The headquarters for our insurance group's U.S. support operations (excluding underwriting units) relocated from New York, New York to Jersey City, New Jersey during the first quarter of 2009. The insurance group has additional offices throughout the U.S., including four regional offices located in: Alpharetta, Georgia; Chicago, Illinois; New York, New York; and San Francisco, California. In addition, Arch Insurance has a branch office in Canada, with head offices in Toronto, Ontario.

Our insurance group's European operations are conducted on two platforms: Arch Insurance Company Europe and Arch Syndicate 2012 (the insurance operations are collectively referred to as "Arch Insurance Europe"). Arch Insurance Europe conducts its operations from London. Arch Insurance Europe also has branches in Germany, Italy, Spain and Denmark. Commencing April 1, 2009, we received approval in principle from the Lloyd's Franchise Board and the Financial Services Authority in the United Kingdom to establish a managing agent and syndicate at Lloyd's. Arch Underwriting at Lloyd's Ltd ("AUAL") is the managing agent of Arch Syndicate 2012 and is responsible for the daily management of Arch Syndicate 2012. Arch Syndicate 2012 has enhanced our underwriting platform by providing us with access to Lloyd's extensive distribution network and worldwide licenses. In 2009, AUAL (Australia) and AUAL (South Africa) were formed, and in the 2009 fourth quarter, AUAL received approval from the Lloyd's Franchise Board to underwrite commercial property business on behalf of Arch Syndicate 2012. AUAL (Australia) commenced underwriting in the 2009 fourth quarter, and AUAL (South Africa) is expected to commence underwriting in the 2010 first quarter.

As of February 15, 2010, our insurance group had approximately 1,120 employees.

Strategy. Our insurance group's strategy is to operate in lines of business in which underwriting expertise can make a meaningful difference in operating results. The insurance group focuses on talent-intensive rather than labor-intensive business and seeks to operate profitably (on both a gross and net basis) across all of its product lines. To achieve these objectives, our insurance group's operating principles are to:

Capitalize on Profitable Underwriting Opportunities. Our insurance group believes that its experienced management and underwriting teams are positioned to locate and identify business with attractive risk/reward characteristics. As profitable underwriting opportunities are identified, our insurance group will continue to seek to make additions to their product portfolio in order to take advantage of market trends. This may include adding underwriting and other professionals with specific expertise in specialty lines of insurance.

Centralize Responsibility for Underwriting. Our insurance group consists of a range of product lines. The underwriting executive in charge of each product line oversees all aspects of the underwriting product development process within such product line. Our insurance group believes that centralizing the control of such product line with the respective underwriting

Table of Contents

executive allows for close management of underwriting and creates clear accountability for results. Our U.S. insurance group has four regional offices, and the executive in charge of each region is primarily responsible for all aspects of the marketing and distribution of our insurance group's products, including the management of broker and other producer relationships in such executive's respective region. In our non-U.S. offices, a similar philosophy is observed, with responsibility for the management of each product line residing with the senior underwriting executive in charge of such product line.

Maintain a Disciplined Underwriting Philosophy. Our insurance group's underwriting philosophy is to generate an underwriting profit through prudent risk selection and proper pricing. Our insurance group believes that the key to this approach is adherence to uniform underwriting standards across all types of business. Our insurance group's senior management closely monitors the underwriting process.

Focus on Providing Superior Claims Management. Our insurance group believes that claims handling is an integral component of credibility in the market for insurance products. Therefore, our insurance group believes that its ability to handle claims expeditiously and satisfactorily is a key to its success. Our insurance group employs experienced claims professionals and also utilizes experienced external claims managers (third party administrators) where appropriate.

Utilize a Brokerage Distribution System. Our insurance group believes that by utilizing a brokerage distribution system, consisting of select international, national and regional brokers, both wholesale and retail, it can efficiently access a broad customer base while maintaining underwriting control and discipline.

Our insurance group writes business on both an admitted and non-admitted basis. Our insurance group focuses on the following areas:

Casualty. Our insurance group's casualty unit writes primary and excess casualty insurance coverages, including railroad and middle market energy business.

Construction. Our insurance group's construction unit provides primary and excess casualty coverages to middle and large accounts in the construction industry. The construction unit also provides coverage for environmental and design professionals, including policies for architectural and engineering firms and construction projects, pollution legal liability coverage for fixed sites, and alternative markets business, including captive insurance programs.

Executive Assurance. Our insurance group's executive assurance unit focuses on directors' and officers' liability insurance coverages for corporate, private equity and financial institution clients of all sizes. This unit also writes financial institution and pension trust errors and omissions coverages, employment practices liability insurance, pension trust errors and omissions/fiduciary liability insurance and fidelity bonds.

Healthcare. Our insurance group's healthcare unit provides medical professional and general liability insurance coverages for the healthcare industry, including excess professional liability programs for large, integrated hospital systems, outpatient facilities, clinics and long-term care facilities.

National Accounts Casualty. Our insurance group's national accounts casualty unit provides a wide range of products for middle and large accounts and specializes in loss sensitive primary casualty insurance programs, including large deductible, self-insured retention and retrospectively rated programs.

Professional Liability. Our insurance group's professional liability unit has the following principal areas of focus: (i) large law firms and accounting firms and professional programs; and

Table of Contents

(ii) miscellaneous professional liability, including coverages for consultants, network security, securities broker-dealers, wholesalers, captive agents and managing general agents.

Programs. Our insurance group's programs unit targets program managers with unique expertise and niche products offering general liability, commercial automobile, inland marine and non-catastrophe-exposed property business. This unit offers primarily package policies, underwriting workers' compensation and umbrella liability business in support of desirable package programs.

Property, Energy, Marine and Aviation. Our insurance group's property unit provides primary and excess general property insurance coverages, including catastrophe-exposed property coverage, for commercial clients and onshore and offshore property insurance coverages for commercial clients primarily in the energy industry. The property unit also provides contractors all risk, erection all risk, aerospace (consisting of aviation and satellite risks) and stand alone terrorism insurance coverage for commercial clients.

Surety. Our insurance group's surety unit provides contract surety coverages, including contract bonds (payment and performance bonds) primarily for mid-size and large contractors and specialty contract bonds for homebuilders and developers.

Travel and Accident. Our insurance group's travel and accident unit provides specialty travel and accident and related insurance products for individual and group travelers, as well as travel agents and suppliers.

Other. Our insurance group also includes the following units: (i) excess workers compensation, which provides excess workers compensation and employers' liability insurance coverages for qualified self-insured groups, associations and trusts in a wide range of businesses; and (ii) lender products, which provides collateral protection insurance coverages for financial institutions and specialty insurance coverage for automotive dealers.

Underwriting Philosophy. Our insurance group's underwriting philosophy is to generate an underwriting profit (on both a gross and net basis) through prudent risk selection and proper pricing across all types of business. One key to this philosophy is the adherence to uniform underwriting standards across each product line that focuses on the following:

risk selection;

desired attachment point;

limits and retention management;

due diligence, including financial condition, claims history, management, and product, class and territorial exposure;

underwriting authority and appropriate approvals; and

collaborative decision-making.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

Premiums Written and Geographic Distribution. Set forth below is summary information regarding net premiums written for our insurance group:

	Years Ended December 31,					
	2009		2008		2007	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Net premiums written						
Property, energy, marine and aviation	\$ 353,761	20.8	\$ 334,635	20.2	\$ 328,966	19.2
Programs	274,735	16.1	270,449	16.3	235,793	13.7
Professional liability	235,892	13.8	246,891	14.9	269,479	15.7
Executive assurance	220,088	12.9	193,602	11.7	185,351	10.8
Construction	154,087	9.0	165,490	10.0	172,061	10.0
Casualty	103,546	6.1	116,096	7.0	183,267	10.7
National accounts casualty	79,088	4.6	47,936	2.9	32,214	1.9
Travel and accident	68,617	4.0	61,986	3.7	58,891	3.4
Surety	43,353	2.5	50,376	3.0	56,062	3.3
Healthcare	42,350	2.5	44,596	2.7	63,757	3.7
Other (1)	128,767	7.7	125,546	7.6	131,707	7.6
Total	\$ 1,704,284	100.0	\$ 1,657,603	100.0	\$ 1,717,548	100.0
Net premiums written by client location						
United States	\$ 1,268,347	74.4	\$ 1,242,906	75.0	\$ 1,323,376	77.1
Europe	267,093	15.7	244,849	14.8	250,824	14.6
Other	168,844	9.9	169,848	10.2	143,348	8.3
Total	\$ 1,704,284	100.0	\$ 1,657,603	100.0	\$ 1,717,548	100.0
Net premiums written by underwriting location						
United States	\$ 1,243,063	72.9	\$ 1,236,712	74.6	\$ 1,309,401	76.2
Europe	384,363	22.6	342,021	20.6	330,746	19.3
Other	76,858	4.5	78,870	4.8	77,401	4.5
Total	\$ 1,704,284	100.0	\$ 1,657,603	100.0	\$ 1,717,548	100.0

(1) Includes excess workers' compensation, employers' liability, and collateral protection business.

Marketing. Our insurance group's products are marketed principally through a group of licensed independent retail and wholesale brokers. Clients (insureds) are referred to our insurance group through a large number of international, national and regional brokers and captive managers who receive from the insured or insurer a set fee or brokerage commission usually equal to a percentage of gross premiums. In the past, our insurance group also entered into contingent commission arrangements with some brokers that provide for the payment of additional commissions based on volume or profitability of business. Currently, some of our contracts with brokers provide for additional commissions based on volume. In general, our insurance group has no implied or explicit commitments to accept business from any particular broker and, neither brokers nor any other third parties have the authority to bind our insurance group, except in the case where underwriting authority may be delegated contractually to select program administrators. Such administrators are subject to a due diligence financial and operational review prior to any such delegation of authority and ongoing reviews

Table of Contents

and audits are carried out as deemed necessary by our insurance group to assure the continuing integrity of underwriting and related business operations. See "Risk Factors Risks Relating to Our Company We could be materially adversely affected to the extent that managing general agents, general agents and other producers in our program business exceed their underwriting authorities or otherwise breach obligations owed to us." For information on major brokers, see note 13, "Commitments and Contingencies Concentrations of Credit Risk," of the notes accompanying our consolidated financial statements.

Risk Management and Reinsurance. In the normal course of business, our insurance group may cede a portion of its premium through quota share, surplus share, excess of loss and facultative reinsurance agreements. Reinsurance arrangements do not relieve our insurance group from its primary obligations to insureds. Reinsurance recoverables are recorded as assets, predicated on the reinsurers' ability to meet their obligations under the reinsurance agreements. If the reinsurers are unable to satisfy their obligations under the agreements, our insurance subsidiaries would be liable for such defaulted amounts. Our insurance subsidiaries, through their respective reinsurance security committees ("RSC"), are selective with regard to reinsurers, seeking to place reinsurance with only those reinsurers which meet and maintain specific standards of established criteria for financial strength. Each RSC evaluates the financial viability of its reinsurers through financial analysis, research and review of rating agencies' reports and also monitors reinsurance recoverables and letters of credit with unauthorized reinsurers. The financial analysis includes ongoing assessments of reinsurers, including a review of the financial stability, appropriate licensing, reputation, claims paying ability and underwriting philosophy of each reinsurer. Our insurance group will continue to evaluate its reinsurance requirements. See note 4, "Reinsurance," of the notes accompanying our consolidated financial statements.

For catastrophe-exposed insurance business, our insurance group seeks to limit the amount of exposure to catastrophic losses it assumes through a combination of managing aggregate limits, underwriting guidelines and reinsurance. For a discussion of our risk management policies, see "Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies, Estimates and Recent Accounting Pronouncements Ceded Reinsurance" and "Risk Factors Risks Relating to Our Industry The failure of any of the loss limitation methods we employ could have a material adverse effect on our financial condition or results of operations."

Claims Management. Our insurance group's claims management function is performed by claims professionals, as well as experienced external claims managers (third party administrators), where appropriate. In addition to investigating, evaluating and resolving claims, members of our insurance group's claims departments work with underwriting professionals as functional teams in order to develop products and services desired by the group's customers.

Our Reinsurance Operations

Our reinsurance operations are conducted on a worldwide basis through our reinsurance subsidiaries, Arch Re Bermuda, Arch Re U.S. (including treaty and property facultative reinsurance operations) and Arch Re Europe. Arch Re Bermuda is headquartered in Hamilton, Bermuda. Arch Re U.S. operates out of its office in Morristown, New Jersey. Our property facultative reinsurance operations are conducted primarily through Arch Re U.S. with certain executive functions conducted through Arch Re Facultative Underwriters Inc. located in Farmington, Connecticut. The property facultative reinsurance operations have offices throughout the U.S. Arch Re Europe is headquartered in Dublin with a branch office in Zurich, and it commenced underwriting in the fourth quarter of 2008 to complement the existing property and casualty treaty capabilities within our reinsurance group.

As of February 15, 2010, our reinsurance group had approximately 170 employees.

Table of Contents

Strategy. Our reinsurance group's strategy is to capitalize on our financial capacity, experienced management and operational flexibility to offer multiple products through our operations. The reinsurance group's operating principles are to:

Actively Select and Manage Risks. Our reinsurance group only underwrites business that meets certain profitability criteria, and it emphasizes disciplined underwriting over premium growth. To this end, our reinsurance group maintains centralized control over reinsurance underwriting guidelines and authorities.

Maintain Flexibility and Respond to Changing Market Conditions. Our reinsurance group's organizational structure and philosophy allows it to take advantage of increases or changes in demand or favorable pricing trends. Our reinsurance group believes that its existing Bermuda-, U.S.- and European-based platform, broad underwriting expertise and substantial capital facilitates adjustments to its mix of business geographically and by line and type of coverage. Our reinsurance group believes that this flexibility allows it to participate in those market opportunities that provide the greatest potential for underwriting profitability.

Maintain a Low Cost Structure. Our reinsurance group believes that maintaining tight control over its staffing level and operating primarily as a broker market reinsurer permits it to maintain low operating costs relative to its capital and premiums.

Our reinsurance group writes business on both a proportional and non-proportional basis and writes both treaty and facultative business. In a proportional reinsurance arrangement (also known as pro rata reinsurance, quota share reinsurance or participating reinsurance), the reinsurer shares a proportional part of the original premiums and losses of the reinsured. The reinsurer pays the cedent a commission which is generally based on the cedent's cost of acquiring the business being reinsured (including commissions, premium taxes, assessments and miscellaneous administrative expenses) and may also include a profit factor. Non-proportional (or excess of loss) reinsurance indemnifies the reinsured against all or a specified portion of losses on underlying insurance policies in excess of a specified amount, which is called a "retention." Non-proportional business is written in layers and a reinsurer or group of reinsurers accepts a band of coverage up to a specified amount. The total coverage purchased by the cedent is referred to as a "program." Any liability exceeding the upper limit of the program reverts to the cedent.

Our reinsurance group generally seeks to write significant lines on less commoditized classes of coverage, such as specialty property and casualty reinsurance treaties. However, with respect to other classes of coverage, such as property catastrophe and casualty clash, our reinsurance group participates in a relatively large number of treaties and assumes smaller lines where it believes that it can underwrite and process the business efficiently.

Our reinsurance group focuses on the following areas:

Casualty. Our reinsurance group reinsures third party liability and workers' compensation exposures from ceding company clients primarily on a treaty basis. The exposures that it reinsures include, among others, directors' and officers' liability, professional liability, automobile liability, workers' compensation and excess and umbrella liability. Our reinsurance group writes this business on a proportional and non-proportional basis. On proportional and non-proportional "working casualty business," which is treated separately from casualty clash business, our reinsurance group prefers to write treaties where there is a meaningful amount of actuarial data and where loss activity is more predictable.

Property Excluding Property Catastrophe. Our treaty reinsurance group reinsures individual property risks of a ceding company. Property per risk treaty and pro rata reinsurance contracts written by our treaty reinsurance group cover claims from individual insurance policies issued by reinsureds and include both personal lines and commercial property exposures (principally

Table of Contents

covering buildings, structures, equipment and contents). The primary perils in this business include fire, explosion, collapse, riot, vandalism, wind, tornado, flood and earthquake.

Through our property facultative reinsurance group, we also write reinsurance on a facultative basis whereby the reinsurer assumes part of the risk under a single insurance contract. Facultative reinsurance is typically purchased by ceding companies for individual risks not covered by their reinsurance treaties, for unusual risks or for amounts in excess of the limits on their reinsurance treaties. Our property facultative reinsurance group focuses on commercial property risks on an excess of loss basis.

Other Specialty. Our reinsurance group writes other specialty lines, including surety, accident and health, workers' compensation catastrophe, trade credit and political risk.

Property Catastrophe. Our reinsurance group reinsures catastrophic perils for our reinsureds on a treaty basis. Treaties in this type of business provide protection for most catastrophic losses that are covered in the underlying policies written by our reinsureds. The primary perils in our reinsurance group's portfolio include hurricane, earthquake, flood, tornado, hail and fire. Our reinsurance group may also provide coverage for other perils on a case-by-case basis. Property catastrophe reinsurance provides coverage on an excess of loss basis when aggregate losses and loss adjustment expense from a single occurrence of a covered peril exceed the retention specified in the contract. The multiple claimant nature of property catastrophe reinsurance requires careful monitoring and control of cumulative aggregate exposure.

Marine and Aviation. Our reinsurance group writes marine business, which includes coverages for hull, cargo, transit and offshore oil and gas operations, and aviation business, which includes coverages for airline and general aviation risks. Business written may also include space business, which includes coverages for satellite assembly, launch and operation for commercial space programs.

Other. Our reinsurance group also writes casualty clash business and, in limited instances, writes non-traditional business which is intended to provide insurers with risk management solutions that complement traditional reinsurance.

Underwriting Philosophy. Our reinsurance group employs a disciplined, analytical approach to underwriting reinsurance risks that is designed to specify an adequate premium for a given exposure commensurate with the amount of capital it anticipates placing at risk. A number of our reinsurance group's underwriters are also actuaries. It is our reinsurance group's belief that employing actuaries on the front-end of the underwriting process gives it an advantage in evaluating risks and constructing a high quality book of business.

As part of the underwriting process, our reinsurance group typically assesses a variety of factors, including:

adequacy of underlying rates for a specific class of business and territory;

the reputation of the proposed cedent and the likelihood of establishing a long-term relationship with the cedent, the geographic area in which the cedent does business, together with its catastrophe exposures, and our aggregate exposures in that area;

historical loss data for the cedent and, where available, for the industry as a whole in the relevant regions, in order to compare the cedent's historical loss experience to industry averages;

projections of future loss frequency and severity; and

the perceived financial strength of the cedent.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

Premiums Written and Geographic Distribution. Set forth below is summary information regarding net premiums written for our reinsurance group:

	Years Ended December 31,					
	2009		2008		2007	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Net premiums written						
Property excluding property catastrophe (1)	\$ 349,915	33.0	\$ 328,684	28.6	\$ 248,367	21.0
Casualty (2)	325,699	30.8	347,198	30.2	466,209	39.4
Property catastrophe	237,445	22.4	231,146	20.1	202,203	17.1
Marine and aviation	77,677	7.3	90,733	7.9	110,586	9.3
Other specialty	65,189	6.2	146,452	12.8	148,776	12.6
Other	2,903	0.3	3,910	0.4	8,247	0.6
Total	\$ 1,058,828	100.0	\$ 1,148,123	100.0	\$ 1,184,388	100.0
Net premiums written by client location						
United States	\$ 668,985	63.2	\$ 631,896	55.0	\$ 688,841	58.2
Europe	213,211	20.1	331,072	28.8	258,952	21.9
Bermuda	127,212	12.0	137,215	12.0	179,935	15.2
Other	49,420	4.7	47,940	4.2	56,660	4.7
Total	\$ 1,058,828	100.0	\$ 1,148,123	100.0	\$ 1,184,388	100.0
Net premiums written by underwriting location						
Bermuda	\$ 596,334	56.3	\$ 662,896	57.7	\$ 691,782	58.4
United States	396,947	37.5	419,805	36.6	471,551	39.8
Other	65,547	6.2	65,422	5.7	21,055	1.8
Total	\$ 1,058,828	100.0	\$ 1,148,123	100.0	\$ 1,184,388	100.0

(1) Includes facultative business.

(2) Includes professional liability, executive assurance and healthcare business.

Marketing. Our reinsurance group markets its reinsurance products through brokers, except our property facultative reinsurance group, which generally deals directly with the ceding companies. Brokers do not have the authority to bind our reinsurance group with respect to reinsurance agreements, nor does our reinsurance group commit in advance to accept any portion of the business that brokers submit to them. Our reinsurance group generally pays brokerage fees to brokers based on negotiated percentages of the premiums written through such brokers. For information on major brokers, see note 13, "Commitments and Contingencies Concentrations of Credit Risk," of the notes accompanying our consolidated financial statements.

Risk Management and Retrocession. Our reinsurance group currently purchases "common account" retrocessional arrangements for certain treaties. Such arrangements reduce the effect of individual or aggregate losses to all companies participating in such treaties, including the reinsurers. Our reinsurance group will continue to evaluate its retrocessional requirements. See note 4, "Reinsurance," of the notes accompanying our consolidated financial statements.

For catastrophe exposed reinsurance business, our reinsurance group seeks to limit the amount of exposure it assumes from any one reinsured and the amount of the aggregate exposure to catastrophe

Table of Contents

losses from a single event in any one geographic zone. For a discussion of our risk management policies, see "Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies, Estimates and Recent Accounting Pronouncements Ceded Reinsurance" and "Risk Factors Risks Relating to Our Industry The failure of any of the loss limitation methods we employ could have a material adverse effect on our financial condition or results of operations."

Claims Management. Claims management includes the receipt of initial loss reports, creation of claim files, determination of whether further investigation is required, establishment and adjustment of case reserves and payment of claims. Additionally, audits are conducted for both specific claims and overall claims procedures at the offices of selected ceding companies. Our reinsurance group makes use of outside consultants for claims work from time to time.

Employees

As of February 15, 2010, ACGL and its subsidiaries employed approximately 1,345 full-time employees.

Reserves

Reserve estimates are derived after extensive consultation with individual underwriters, actuarial analysis of the loss reserve development and comparison with industry benchmarks. Our reserves are established and reviewed by experienced internal actuaries. Generally, reserves are established without regard to whether we may subsequently contest the claim. We do not currently discount our loss reserves except for excess workers' compensation and employers' liability loss reserves.

Loss reserves represent estimates of what the insurer or reinsurer ultimately expects to pay on claims at a given time, based on facts and circumstances then known, and it is probable that the ultimate liability may exceed or be less than such estimates. Even actuarially sound methods can lead to subsequent adjustments to reserves that are both significant and irregular due to the nature of the risks written. Loss reserves are inherently subject to uncertainty. In establishing the reserves for losses and loss adjustment expenses, we have made various assumptions relating to the pricing of our reinsurance contracts and insurance policies and have also considered available historical industry experience and current industry conditions. The timing and amounts of actual claim payments related to recorded reserves vary based on many factors including large individual losses, changes in the legal environment, as well as general market conditions. The ultimate amount of the claim payments could differ materially from our estimated amounts. Certain lines of business written by us, such as excess casualty, have loss experience characterized as low frequency and high severity. This may result in significant variability in loss payment patterns and, therefore, may impact the related asset/liability investment management process in order to be in a position, if necessary, to make these payments. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies, Estimates and Recent Accounting Pronouncements Reserves for Losses and Loss Adjustment Expenses."

The following table represents the development of loss reserves as determined under accounting principles generally accepted in the United States of America ("GAAP") for 1999 through 2009. Results for 1999 to 2000 relate to our prior reinsurance operations, which were sold on May 5, 2000 to WTM Re. With respect to 2000, no reserves are reported in the table below because all reserves for business written through May 5, 2000 were assumed by WTM Re in the May 5, 2000 asset sale, and we did not write or assume any business during 2000 subsequent to the asset sale. Activity subsequent to 2000 relates to acquisitions made by us and our underwriting initiatives that commenced in October 2001.

Table of Contents

This table does not present accident or policy year development data and, instead, presents an analysis of the claim development of gross and net balance sheet reserves existing at each calendar year-end in subsequent calendar years. The top line of the table shows the reserves, net of reinsurance recoverables, at the balance sheet date for each of the indicated years. This represents the estimated amounts of net losses and loss adjustment expenses arising in all prior years that are unpaid at the balance sheet date, including incurred but not reported ("IBNR") reserves. The table also shows the re-estimated amount of the previously recorded reserves based on experience as of the end of each succeeding year. The estimate changes as more information becomes known about the frequency and severity of claims for individual years. The "cumulative redundancy (deficiency)" represents the aggregate change in the estimates over all prior years. The table also shows the cumulative amounts paid as of successive years with respect to that reserve liability. In addition, the table reflects the claim development of the gross balance sheet reserves for ending reserves at December 31, 1999 through December 31, 2008. With respect to the information in the table, it should be noted that each amount includes the effects of all changes in amounts for prior periods.

**Development of GAAP Reserves
Cumulative Redundancy (Deficiency)**

(U.S. dollars in millions)	Years Ended December 31,										
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Reserve for losses and loss adjustment expenses, net of reinsurance recoverables	\$ 309		\$ 21	\$ 381	\$ 1,543	\$ 2,875	\$ 4,063	\$ 4,911	\$ 5,483	\$ 5,938	\$ 6,214
Cumulative net paid losses as of:											
One year later	311		15	82	278	449	745	843	954	1,167	
Two years later	311		19	141	437	811	1,332	1,486	1,817		
Three years later	311		24	172	596	1,110	1,688	2,040			
Four years later	311		26	204	706	1,300	1,993				
Five years later	311		26	218	787	1,478					
Six years later	311		25	233	853						
Seven years later	311		25	243							
Eight years later	311		25								
Nine years later	311										
Ten years later	311										
Net re-estimated reserve as of:											
One year later	311		25	340	1,444	2,756	3,986	4,726	5,173	5,749	
Two years later	311		25	335	1,353	2,614	3,809	4,387	4,959		
Three years later	311		27	335	1,259	2,487	3,541	4,164			
Four years later	311		27	313	1,237	2,353	3,381				
Five years later	311		28	316	1,187	2,305					
Six years later	311		26	302	1,183						
Seven years later	311		25	291							
Eight years later	311		26								
Nine years later	311										
Ten years later	311										
Cumulative net redundancy (deficiency)	(\$ 2)	(\$ 5)	\$ 90	\$ 360	\$ 570	\$ 682	\$ 747	\$ 524	\$ 189		

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Cumulative net redundancy (deficiency) as a percentage of net reserves	(1.0)	(22.6)	23.6	23.3	19.8	16.8	15.2	9.6	3.2	
Gross reserve for losses and loss adjustment expenses	\$ 365	\$ 111	\$ 592	\$ 1,912	\$ 3,493	\$ 5,453	\$ 6,463	\$ 7,092	\$ 7,667	\$ 7,873
Reinsurance recoverable	(56)	(90)	(211)	(369)	(618)	(1,390)	(1,552)	(1,609)	(1,729)	(1,659)
Net reserve for losses and loss adjustment expenses	309	21	381	1,543	2,875	4,063	\$ 4,911	\$ 5,483	\$ 5,938	\$ 6,214
Gross re-estimated reserve	367	182	518	1,473	2,794	4,685	5,488	6,457	7,376	
Re-estimated reinsurance recoverable	(56)	(156)	(227)	(290)	(489)	(1,304)	(1,324)	(1,498)	(1,627)	
Net re-estimated reserve	311	26	291	1,183	2,305	3,381	4,164	4,959	5,749	
Gross re-estimated redundancy (deficiency)	(\$ 2)	(\$ 71)	\$ 74	\$ 439	\$ 699	\$ 768	\$ 975	\$ 635	\$ 291	

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

The following table represents an analysis of losses and loss adjustment expenses and a reconciliation of the beginning and ending reserve for losses and loss adjustment expenses.

	Years Ended December 31,		
	2009	2008	2007
Reserve for losses and loss adjustment expenses at beginning of year	\$ 7,666,957	\$ 7,092,452	\$ 6,463,041
Unpaid losses and loss adjustment expenses recoverable	1,729,135	1,609,619	1,552,157
Net reserve for losses and loss adjustment expenses at beginning of year	5,937,822	5,482,833	4,910,884
Net incurred losses and loss adjustment expenses relating to losses occurring in:			
Current year	1,843,875	2,158,914	1,829,534
Prior years	(189,201)	(310,170)	(185,364)
Total net incurred losses and loss adjustment expenses	1,654,674	1,848,744	1,644,170
Foreign exchange (gains) losses	60,506	(133,881)	45,192
Net paid losses and loss adjustment expenses relating to losses occurring in:			
Current year	(272,295)	(305,513)	(274,102)
Prior years	(1,166,795)	(954,361)	(843,311)
Total net paid losses and loss adjustment expenses	(1,439,090)	(1,259,874)	(1,117,413)
Net reserve for losses and loss adjustment expenses at end of year	6,213,912	5,937,822	5,482,833
Unpaid losses and loss adjustment expenses recoverable	1,659,500	1,729,135	1,609,619
Reserve for losses and loss adjustment expenses at end of year	\$ 7,873,412	\$ 7,666,957	\$ 7,092,452

Our initial reserving method to date has to a large extent been the expected loss method, which is commonly applied when limited loss experience exists. We select the initial expected loss and loss adjustment expense ratios based on information derived by our underwriters and actuaries during the initial pricing of the business, supplemented by industry data where appropriate. These ratios consider, among other things, rate changes and changes in terms and conditions that have been observed in the market. Any estimates and assumptions made as part of the reserving process could prove to be inaccurate due to several factors, including the fact that relatively limited historical information has been reported to us through December 31, 2009. We employ a number of different reserving methods depending on the segment, the line of business, the availability of historical loss experience and the stability of that loss experience. Over time, we have given additional weight to our historical loss experience in our reserving process due to the continuing maturation of our reserves, and the increased availability and credibility of the historical experience. For additional information regarding the key underlying movements in our losses and loss adjustment expenses in 2007 to 2009 by segment, see "Management's Discussion and Analysis of Financial Condition and Results of Operations Results of Operations."

Unpaid and paid losses and loss adjustment expenses recoverable were approximately \$1.72 billion at December 31, 2009. We are subject to credit risk with respect to our reinsurance and retrocessions because the ceding of risk to reinsurers and retrocessionaires does not relieve us of our liability to the clients or companies we insure or reinsure. Our failure to establish adequate reinsurance or retrocessional arrangements or the failure of our existing reinsurance or retrocessional arrangements to protect us from overly concentrated risk exposure could adversely affect our financial condition and results of operations. Although we monitor the financial condition of our reinsurers and retrocessionaires and attempt to place coverages only with substantial, financially sound carriers, we may not be successful in doing so.

Table of Contents**Investments**

At December 31, 2009, consolidated cash and invested assets totaled approximately \$11.3 billion, as summarized in the table below. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Financial Condition, Liquidity and Capital Resources Financial Condition Investable Assets" and note 7, "Investment Information," of the notes accompanying our financial statements.

The following table summarizes the market value of our cash and invested assets at December 31, 2009 and 2008:

	December 31,			
	2009	% of	2008	% of
	Estimated Market Value	Total	Estimated Market Value	Total
Cash and short-term investments (1)	\$ 910,054	8.0	\$ 832,889	8.3
Fixed maturities and fixed maturities pledged under securities lending agreements (1):				
Corporate bonds	\$ 3,134,088	27.7	2,019,373	20.2
U.S. government and government agencies	1,553,672	13.7	1,463,897	14.7
Mortgage backed securities	1,449,382	12.8	1,581,736	15.8
Commercial mortgage backed securities	1,185,799	10.5	1,219,737	12.2
Municipal bonds	957,752	8.5	965,966	9.7
Non-U.S. government securities	752,215	6.6	527,972	5.3
Asset backed securities	567,844	5.0	970,041	9.7
Sub-total	9,600,752	84.8	8,748,722	87.6
Investment funds accounted for using the equity method	391,869	3.5	301,027	3.0
TALF investments, at market value (3)	250,265	2.2		
Other investments	172,172	1.5	109,601	1.1
Total cash and invested assets (1)(2)	\$ 11,325,112	100.0	\$ 9,992,239	100.0

(1) In our securities lending transactions, we receive collateral in excess of the market value of the fixed maturities and short-term investments pledged under securities lending agreements. For purposes of this table, we have excluded \$207.0 million and \$730.2 million, respectively, of collateral received and reinvested, and included \$212.8 million and \$728.1 million, respectively, of "fixed maturities and short-term investments pledged under securities lending agreements, at market value" at December 31, 2009 and 2008.

(2) Includes certain securities transactions entered into but not settled at the balance sheet date. Net of such amounts, total cash and investments were approximately \$11.38 billion at December 31, 2009 and \$9.97 billion at December 31, 2008.

(3) We participate in the Federal Reserve Bank of New York's ("FRBNY") Term Asset-Backed Securities Loan Facility ("TALF"), which provides secured financing for asset-backed securities backed by certain types of consumer and small-business loans and for legacy commercial mortgage-backed securities. TALF financing is non-recourse to us, except in certain limited instances, and is collateralized by the purchased securities and provides financing for the purchase price of the securities, less a 'haircut' that varies based on the type of collateral. We can deliver the collateralized securities to a special purpose vehicle created by the FRBNY in full defeasance of the borrowings. At December 31, 2009, we had \$250.3 million of securities under TALF which are reflected as "TALF investments, at

Table of Contents

market value" and \$217.6 million of secured financing from the FRBNY that is reflected as "TALF borrowings, at market value."

Our current investment guidelines and approach stress preservation of capital, market liquidity and diversification of risk. Our investments are subject to market-wide risks and fluctuations, as well as to risks inherent in particular securities. While maintaining our emphasis on preservation of capital and liquidity, we expect our portfolio to become more diversified and, as a result, we may expand into areas which are not currently part of our investment strategy. At December 31, 2009, approximately 95% of our fixed maturities and fixed maturities pledged under securities lending agreements were rated investment grade by the major rating agencies, primarily Standard & Poor's Rating Services ("Standard & Poor's"), compared to 97% at December 31, 2008. At December 31, 2009 and 2008, our fixed maturities, fixed maturities pledged under securities lending agreements and short-term investments had an average credit quality rating of "AA+" and an average effective duration of approximately 2.87 years and 3.62 years, respectively.

The credit quality distribution of our fixed maturities and fixed maturities pledged under securities lending agreements at December 31, 2009 and 2008 are shown below:

Rating (1)	December 31, 2009		December 31, 2008	
	Estimated Market Value	% of Total	Estimated Market Value	% of Total
AAA	\$ 7,072,381	73.7	\$ 6,756,503	77.2
AA	1,281,377	13.3	815,512	9.3
A	547,104	5.7	750,947	8.6
BBB	231,988	2.4	195,319	2.2
BB	85,952	0.9	52,349	0.6
B	209,417	2.2	126,688	1.5
Lower than B	80,871	0.8	9,549	0.1
Not rated	91,662	1.0	41,855	0.5
Total	\$ 9,600,752	100.0	\$ 8,748,722	100.0

(1) Ratings as assigned by the major rating agencies.

For 2009, 2008 and 2007, set forth below is the pre-tax total return (before investment expenses) of our investment portfolio (including fixed maturities, short-term investments and fixed maturities and short-term investments pledged under securities lending agreements) compared to the benchmark return against which we measured our portfolio during the year. Our investment expenses were approximately 0.20% of average invested assets in 2009, compared to 0.14% in 2008 and 0.15% in 2007.

	Arch Portfolio	Benchmark Return (1)
Pre-tax total return (before investment expenses):		
Year ended December 31, 2009	11.28%	9.71%
Year ended December 31, 2008	(2.84%)	(1.42%)
Year ended December 31, 2007	6.52%	6.97%

(1) The benchmark return is a weighted average of the benchmarks assigned to each of our investment managers. The benchmarks used vary based on the nature of the portfolios under management.

Table of Contents**Ratings**

Our ability to underwrite business is dependent upon the quality of our claims paying ability and financial strength ratings as evaluated by independent agencies. Such ratings from third party internationally recognized statistical rating organizations or agencies are instrumental in establishing the competitive positions of companies in our industry. We believe that the primary users of such ratings include commercial and investment banks, policyholders, brokers, ceding companies and investors. Insurance ratings are also used by insurance and reinsurance intermediaries as an important means of assessing the financial strength and quality of insurers and reinsurers, and have become an increasingly important factor in establishing the competitive position of insurance and reinsurance companies. These ratings are often an important factor in the decision by an insured or intermediary of whether to place business with a particular insurance or reinsurance provider. Periodically, rating agencies evaluate us to confirm that we continue to meet their criteria for the ratings assigned to us by them. A.M. Best Company ("A.M. Best") maintains a letter scale rating system ranging from "A++" (Superior) to "F" (In Liquidation). Moody's Investors Service ("Moody's") maintains a letter scale rating from "Aaa" (Exceptional) to "NP" (Not Prime). Standard & Poor's maintains a letter scale rating system ranging from "AAA" (Extremely Strong) to "R" (Under Regulatory Supervision). Fitch Ratings ("Fitch") maintains a letter scale rating system ranging from "AAA" (Exceptionally Strong) to "C" (Distressed).

Our reinsurance subsidiaries, Arch Re U.S., Arch Re Bermuda and Arch Re Europe (Standard & Poor's and Fitch only), and our principal insurance subsidiaries, Arch Insurance, Arch E&S, Arch Specialty and Arch Insurance Company Europe, each currently has a financial strength rating of "A" (Excellent, the third highest out of fifteen rating levels) with a stable outlook from A.M. Best, "A2" (Good, the sixth highest out of 21 rating levels) with a stable outlook from Moody's, "A" (Strong, the sixth highest out of 21 rating levels) with a positive outlook from Standard & Poor's, and "A+" (Strong, the fifth highest out of 24 rating levels) with a stable outlook from Fitch. A.M. Best has assigned a financial strength rating of "NR-3" (Rating Procedure Inapplicable) to Arch Indemnity, which is not writing business currently. Lloyd's has financial strength ratings of "A" (Excellent) with a stable outlook from A.M. Best, "A+" (Strong) with a stable outlook from Standard & Poor's and "A+" (Strong) with a stable outlook from Fitch.

ACGL has received counterparty (issuer) credit ratings of "BBB+" (eighth highest out of 22 rating levels) with a positive outlook from Standard & Poor's, "Baa1" (eighth highest out of 21 rating levels) with a stable outlook from Moody's and "A" long term issuer rating (sixth highest out of 23 rating levels) with a stable outlook from Fitch. A counterparty credit rating provides an opinion on an issuer's overall capacity and willingness to meet its financial commitments as they become due, but is not specific to a particular financial obligation. ACGL's senior debt was assigned a rating of "BBB+" from Standard & Poor's, "Baa1" from Moody's and "A-" from Fitch. ACGL's series A non-cumulative preferred shares and series B non-cumulative preferred shares were both assigned a "BBB-" rating by Standard & Poor's, a "Baa3" by Moody's and a "BBB" rating by Fitch.

The financial strength ratings assigned by rating agencies to insurance and reinsurance companies represent independent opinions of financial strength and ability to meet policyholder obligations and are not directed toward the protection of investors, nor are they recommendations to buy, hold or sell any securities. We can offer no assurances that our ratings will remain at their current levels, or that our security will be accepted by brokers and our insureds and reinsureds. A ratings downgrade or the potential for such a downgrade, or failure to obtain a necessary rating, could adversely affect both our relationships with agents, brokers, wholesalers and other distributors of our existing products and services and new sales of our products and services. In addition, under certain of the reinsurance agreements assumed by our reinsurance operations, upon the occurrence of a ratings downgrade or other specified triggering event with respect to our reinsurance operations, such as a reduction in surplus by specified amounts during specified periods, our ceding company clients may be provided with certain rights, including, among other things, the right to terminate the subject reinsurance

Table of Contents

agreement and/or to require that our reinsurance operations post additional collateral. In the event of a ratings downgrade or other triggering event, the exercise of such contract rights by our clients could have a material adverse effect on our financial condition and results of operations, as well as our ongoing business and operations. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Financial Condition, Liquidity and Capital Resources Liquidity and Capital Resources."

Competition

The worldwide reinsurance and insurance businesses are highly competitive. We compete, and will continue to compete, with major U.S. and non-U.S. insurers and reinsurers, some of which have greater financial, marketing and management resources than we have and have had longer-term relationships with insureds and brokers than us. We compete with other insurers and reinsurers primarily on the basis of overall financial strength, ratings assigned by independent rating agencies, geographic scope of business, strength of client relationships, premiums charged, contract terms and conditions, products and services offered, speed of claims payment, reputation, employee experience, and qualifications and local presence. We also compete with new companies that continue to be formed to enter the insurance and reinsurance markets.

In our insurance business, we compete with insurers that provide specialty property and casualty lines of insurance, including: ACE Limited, Allied World Assurance Company, Ltd., Chartis, Inc., AXIS Capital Holdings Limited, Berkshire Hathaway, Inc., Chubb Corporation, Endurance Specialty Holdings Ltd., Fairfax Financial Holdings Ltd, The Hartford Financial Services Group, Inc., HCC Insurance Holdings, Inc., Lloyd's, The Travelers Companies, Validus Holdings Ltd, W.R. Berkley Corp., XL Capital Ltd. and Zurich Insurance Group. In our reinsurance business, we compete with reinsurers that provide property and casualty lines of reinsurance, including ACE Limited, Argo International Holdings, Ltd., AXIS Capital Holdings Limited, Berkshire Hathaway, Inc., Endurance Specialty Holdings Ltd., Everest Re Group Ltd., Fairfax Financial Holdings Ltd, Hannover Rückversicherung AG, Lloyd's, Harbor Point Limited, Montpelier Re Holdings Ltd., Munich Re Group, PartnerRe Ltd., Platinum Underwriters Holdings, Ltd., RenaissanceRe Holdings Ltd., Swiss Reinsurance Company, Transatlantic Holdings, Inc., Validus Holdings Ltd and XL Capital Ltd. We do not believe that we have a significant market share in any of our markets.

Regulation

U.S. Insurance Regulation

General. In common with other insurers, our U.S.-based subsidiaries are subject to extensive governmental regulation and supervision in the various states and jurisdictions in which they are domiciled and licensed and/or approved to conduct business. The laws and regulations of the state of domicile have the most significant impact on operations. This regulation and supervision is designed to protect policyholders rather than investors. Generally, regulatory authorities have broad regulatory powers over such matters as licenses, standards of solvency, premium rates, policy forms, marketing practices, claims practices, investments, security deposits, methods of accounting, form and content of financial statements, reserves and provisions for unearned premiums, unpaid losses and loss adjustment expenses, reinsurance, minimum capital and surplus requirements, dividends and other distributions to shareholders, periodic examinations and annual and other report filings. In addition, transactions among affiliates, including reinsurance agreements or arrangements, as well as certain third party transactions, require prior regulatory approval from, or prior notice to, the applicable regulator under certain circumstances. Certain insurance regulatory requirements are highlighted below. In addition, regulatory authorities conduct periodic financial, claims and market conduct examinations. Arch Insurance Company Europe is also subject to certain governmental regulation and supervision in the various states where it has been approved as an excess and surplus lines insurer.

Table of Contents

The New York Attorney General, various state insurance regulatory authorities and others continue to prosecute actions arising out of contingent commission payments to brokers (and the disclosures relating to such payments), "bid-rigging," "steering," and other practices in the insurance industry. Although certain brokers have announced new fee structures in response to the industry investigations and, as part of these new initiatives, have requested that our insurance subsidiaries enter into standardized payment arrangements, we have determined to negotiate payment arrangements with our brokers on a case by case basis. However, this has not affected certain agreements between our insurance subsidiaries and managing general agents providing for the payment to such agents of additional commissions based upon the profitability of the business produced by those agents. A number of brokers recently announced that they have reached agreement with the New York Attorney General and other state insurance regulatory authorities which would allow them to collect contingent commissions once again. However, we cannot predict the effect that this agreement or these prosecutions, any related investigations and/or resulting changes in insurance practices (including future legislation and/or regulations that may become applicable to our business) will have on the insurance industry, the regulatory framework or our business. See "Risk Factors Risks Relating to Our Industry Our reliance on brokers subjects us to their credit risk."

Credit for Reinsurance. Arch Re U.S. is subject to insurance regulation and supervision that is similar to the regulation of licensed primary insurers. However, except for certain mandated provisions that must be included in order for a ceding company to obtain credit for reinsurance ceded, the terms and conditions of reinsurance agreements generally are not subject to regulation by any governmental authority. This contrasts with admitted primary insurance policies and agreements, the rates and terms of which generally are regulated by state insurance regulators. As a practical matter, however, the rates charged by primary insurers do have an effect on the rates that can be charged by reinsurers.

A primary insurer ordinarily will enter into a reinsurance agreement only if it can obtain credit for the reinsurance ceded on its U.S. statutory-basis financial statements. In general, credit for reinsurance is allowed in the following circumstances:

if the reinsurer is licensed in the state in which the primary insurer is domiciled or, in some instances, in certain states in which the primary insurer is licensed;

if the reinsurer is an "accredited" or otherwise approved reinsurer in the state in which the primary insurer is domiciled or, in some instances, in certain states in which the primary insurer is licensed;

in some instances, if the reinsurer (a) is domiciled in a state that is deemed to have substantially similar credit for reinsurance standards as the state in which the primary insurer is domiciled and (b) meets certain financial requirements; or

if none of the above apply, to the extent that the reinsurance obligations of the reinsurer are collateralized appropriately, typically through the posting of a letter of credit for the benefit of the primary insurer or the deposit of assets into a trust fund established for the benefit of the primary insurer.

As a result of the requirements relating to the provision of credit for reinsurance, Arch Re U.S. and Arch Re Bermuda are indirectly subject to certain regulatory requirements imposed by jurisdictions in which ceding companies are licensed.

As of February 15, 2010: (1) Arch Re U.S. is licensed or is an accredited or otherwise approved reinsurer in 50 states and the District of Columbia; (2) Arch Insurance is licensed as an insurer in 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and Guam with a branch office in Canada; (3) Arch Specialty is licensed in one state and approved as an excess and surplus lines insurer in 49 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands; (4) Arch E&S is licensed in one state and approved as an excess and surplus lines insurer in 47 states and the District of

Table of Contents

Columbia; (5) Arch Indemnity is licensed as an insurer in 49 states and the District of Columbia; and (6) Arch Insurance Company Europe is approved as an excess and surplus lines insurer in 17 states and the District of Columbia. Neither Arch Re Bermuda nor Arch Re Europe expects to become licensed, accredited or so approved in any U.S. jurisdiction.

Holding Company Acts. All states have enacted legislation that regulates insurance holding company systems. These regulations generally provide that each insurance company in the system is required to register with the insurance department of its state of domicile and furnish information concerning the operations of companies within the holding company system which may materially affect the operations, management or financial condition of the insurers within the system. All transactions within a holding company system affecting insurers must be fair and reasonable. Notice to the insurance departments is required prior to the consummation of transactions affecting the ownership or control of an insurer and of certain material transactions between an insurer and any entity in its holding company system. In addition, certain of such transactions cannot be consummated without the applicable insurance department's prior approval.

Regulation of Dividends and Other Payments from Insurance Subsidiaries. The ability of an insurer to pay dividends or make other distributions is subject to insurance regulatory limitations of the insurance company's state of domicile. Generally, such laws limit the payment of dividends or other distributions above a specified level. Dividends or other distributions in excess of such thresholds are "extraordinary" and are subject to prior regulatory approval. Such dividends or distributions may be subject to applicable withholding or other taxes. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Financial Condition, Liquidity and Capital Resources Liquidity and Capital Resources" and note 17, "Statutory Information," of the notes accompanying our financial statements.

Insurance Regulatory Information System Ratios. The National Association of Insurance Commissioners ("NAIC") Insurance Regulatory Information System ("IRIS") was developed by a committee of state insurance regulators and is intended primarily to assist state insurance departments in executing their statutory mandates to oversee the financial condition of insurance companies operating in their respective states. IRIS identifies 13 industry ratios (referred to as "IRIS ratios") and specifies "usual values" for each ratio. Departure from the usual values of the IRIS ratios can lead to inquiries from individual state insurance commissioners as to certain aspects of an insurer's business. For 2009, certain of our U.S.-based subsidiaries generated IRIS ratios that were outside of the usual values. To date, none of these subsidiaries has received any notice of regulatory review but there is no assurance that we may not be notified in the future.

Accreditation. The NAIC has instituted its Financial Regulatory Accreditation Standards Program ("FRASP") in response to federal initiatives to regulate the business of insurance. FRASP provides a set of standards designed to establish effective state regulation of the financial condition of insurance companies. Under FRASP, a state must adopt certain laws and regulations, institute required regulatory practices and procedures, and have adequate personnel to enforce such items in order to become an "accredited" state. If a state is not accredited, other states may not accept certain financial examination reports of insurers prepared solely by the regulatory agency in such unaccredited state. The respective states in which Arch Re U.S., Arch Insurance, Arch E&S, Arch Specialty and Arch Indemnity are domiciled are accredited states.

Risk-Based Capital Requirements. In order to enhance the regulation of insurer solvency, the NAIC adopted in December 1993 a formula and model law to implement risk-based capital requirements for property and casualty insurance companies. These risk-based capital requirements are designed to assess capital adequacy and to raise the level of protection that statutory surplus provides for

Table of Contents

policyholder obligations. The risk-based capital model for property and casualty insurance companies measures three major areas of risk facing property and casualty insurers:

underwriting, which encompasses the risk of adverse loss developments and inadequate pricing;

declines in asset values arising from credit risk; and

declines in asset values arising from investment risks.

An insurer will be subject to varying degrees of regulatory action depending on how its statutory surplus compares to its risk-based capital calculation. Equity investments in common stock typically are valued at 85% of their market value under the risk-based capital guidelines. For equity investments in an insurance company affiliate, the risk-based capital requirements for the equity securities of such affiliate would generally be our U.S.-based subsidiaries' proportionate share of the affiliate's risk-based capital requirement.

Under the approved formula, an insurer's total adjusted capital is compared to its authorized control level risk-based capital. If this ratio is above a minimum threshold, no company or regulatory action is necessary. Below this threshold are four distinct action levels at which a regulator can intervene with increasing degrees of authority over an insurer as the ratio of surplus to risk-based capital requirement decreases. The four action levels include:

insurer is required to submit a plan for corrective action;

insurer is subject to examination, analysis and specific corrective action;

regulators may place insurer under regulatory control; and

regulators are required to place insurer under regulatory control.

Each of our U.S. subsidiaries' surplus (as calculated for statutory purposes) is above the risk-based capital thresholds that would require either company or regulatory action.

Guaranty Funds and Assigned Risk Plans. Most states require all admitted insurance companies to participate in their respective guaranty funds which cover certain claims against insolvent insurers. Solvent insurers licensed in these states are required to cover the losses paid on behalf of insolvent insurers by the guaranty funds and are generally subject to annual assessments in the states by the guaranty funds to cover these losses. Participation in state-assigned risk plans may take the form of reinsuring a portion of a pool of policies or the direct issuance of policies to insureds. The calculation of an insurer's participation in these plans is usually based on the amount of premium for that type of coverage that was written by the insurer on a voluntary basis in a prior year. Assigned risk pools tend to produce losses which result in assessments to insurers writing the same lines on a voluntary basis.

Federal Regulation. Although state regulation is the dominant form of regulation for insurance and reinsurance business, the federal government has shown increasing concern over the adequacy of state regulation. It is not possible to predict the future impact of any potential federal regulations or other possible laws or regulations on our U.S.-based subsidiaries' capital and operations, and such laws or regulations could materially adversely affect their business.

Terrorism Risk Insurance Program Reauthorization Act of 2007. On November 26, 2002, President Bush signed into law the Terrorism Risk Insurance Act of 2002, which was amended and extended by the Terrorism Risk Insurance Extension Act of 2005 and amended and extended again by the Terrorism Risk Insurance Program Reauthorization Act of 2007 ("TRIPRA") through December 31, 2014. TRIPRA provides a federal backstop for insurance-related losses resulting from any act of terrorism on U.S. soil or against certain U.S. air carriers, vessels or foreign missions. Under TRIPRA, all U.S.-based property and casualty insurers are required to make terrorism insurance coverage

available in specified commercial property and casualty insurance lines. Under TRIPRA, the federal government will pay

Table of Contents

85% of covered losses after an insurer's losses exceed a deductible determined by a statutorily prescribed formula, up to a combined annual aggregate limit for the federal government and all insurers of \$100 billion. If an act (or acts) of terrorism result in covered losses exceeding the \$100 billion annual limit, insurers with losses exceeding their deductibles will not be responsible for additional losses. The deductible for each year is based on the insurer's direct commercial earned premiums for property and casualty insurance, excluding certain lines of business such as commercial auto, surety, professional liability and earthquake lines of business, for the prior calendar year multiplied by 20%. The specified percentages for prior periods were 15% for 2005, 17.5% for 2006, 20% for 2007, 20% for 2008 and 20% for 2009, which extends through 2014.

Our U.S.-based property and casualty insurers, Arch Insurance, Arch Specialty, Arch E&S and Arch Indemnity, are subject to TRIPRA. TRIPRA specifically excludes reinsurance business and, accordingly, does not apply to our reinsurance operations. Our U.S. insurance group's deductible for 2009 was approximately \$244.1 million (i.e., 20.0% of earned premiums). Based on 2009 direct commercial earned premiums, our U.S. insurance group's deductible for 2010 will be approximately \$247.0 million (i.e., 20.0% of such earned premiums).

The Gramm-Leach-Bliley Act. The Gramm-Leach-Bliley Act of 1999 ("GLBA"), which implements fundamental changes in the regulation of the financial services industry in the United States, was enacted on November 12, 1999. The GLBA permits the transformation of the already converging banking, insurance and securities industries by permitting mergers that combine commercial banks, insurers and securities firms under one holding company, a "financial holding company." Bank holding companies and other entities that qualify and elect to be treated as financial holding companies may engage in activities, and acquire companies engaged in activities, that are "financial" in nature or "incidental" or "complementary" to such financial activities. Such financial activities include acting as principal, agent or broker in the underwriting and sale of life, property, casualty and other forms of insurance and annuities.

Until the passage of the GLBA, the Glass-Steagall Act of 1933 had limited the ability of banks to engage in securities-related businesses, and the Bank Holding Company Act of 1956 had restricted banks from being affiliated with insurers. With the passage of the GLBA, among other things, bank holding companies may acquire insurers, and insurance holding companies may acquire banks. The ability of banks to affiliate with insurers may affect our U.S. subsidiaries' product lines by substantially increasing the number, size and financial strength of potential competitors.

Legislative and Regulatory Proposals. From time to time various regulatory and legislative changes have been proposed in the insurance and reinsurance industry. Among the proposals that have in the past been or are at present being considered are the possible introduction of federal regulation in addition to, or in lieu of, the current system of state regulation of insurers. In addition, there are a variety of proposals being considered by various state legislatures. One ongoing initiative is the Solvency Modernization Initiative ("SMI"), which is a self-examination of the U.S. insurance solvency regulation framework being undertaken by the NAIC. This includes a review of international developments regarding supervision, banking supervision, international accounting standards and their potential use in U.S. insurance regulation. The SMI is focusing on five solvency issues: capital requirements, international accounting, insurance valuation, reinsurance and group regulatory issues.

In December 2008, the NAIC adopted its Reinsurance Regulatory Modernization Framework Proposal (the "Reinsurance Proposal"), which aims to eliminate the universal 100 percent collateral requirement presently imposed on foreign reinsurers, such as Arch Re Bermuda, and establishes instead a sliding scale percentage rating system for assessing collateral obligations. To this end, the Reinsurance Proposal creates two new classes of reinsurers in the United States: "national" reinsurers and "port of entry" ("POE") reinsurers. A national reinsurer is licensed and domiciled in a U.S. home state and approved by such state to transact reinsurance business across the U.S. while submitting

Table of Contents

solely to the regulatory authority of the home state supervisor. A POE reinsurer is defined as a non-U.S. assuming reinsurer that is certified in a port of entry state and approved by such state to provide creditable reinsurance to the U.S. market.

The Reinsurance Proposal also creates a single regulatory body, the Reinsurance Supervision Review Department ("RSRD"), that will establish uniform standards for evaluating reinsurance regulations of the United States and foreign countries. Through the use of uniform standards, the RSRD will determine whether POE reinsurers qualify for reduced collateral requirements. New York has also initiated its own collateral reform proposals, which, if adopted, would create collateral standards that, like the Reinsurance Proposal, focus primarily on the financial strength of reinsurers without regard to jurisdictions of domicile. The Reinsurance Proposal, however, is not self-executing and does not become effective until Congress enacts legislation that preempts state laws that impose higher collateral requirements than the domestic or port of entry states require.

We are unable to predict whether any of these proposed laws and regulations will be adopted, the form in which any such laws and regulations would be adopted, or the effect, if any, these developments would have on our operations and financial condition. See " U.S. Insurance Regulation General."

Bermuda Insurance Regulation

The Insurance Act 1978, as Amended, and Related Regulations of Bermuda (the "Insurance Act"). As a holding company, ACGL is not subject to Bermuda insurance regulations. The Insurance Act, which regulates the insurance business of Arch Re Bermuda, provides that no person shall carry on any insurance business in or from within Bermuda unless registered as an insurer under the Insurance Act by the Bermuda Monetary Authority (the "BMA"), which is responsible for the day-to-day supervision of insurers. Under the Insurance Act, insurance business includes reinsurance business. The registration of an applicant as an insurer is subject to its complying with the terms of its registration and such other conditions as the BMA may impose from time to time.

The Insurance Act imposes solvency and liquidity standards and auditing and reporting requirements on Bermuda insurance companies and grants to the BMA powers to supervise, investigate and intervene in the affairs of insurance companies. Certain significant aspects of the Bermuda insurance regulatory framework are set forth below.

Classification of Insurers. The Insurance Act distinguishes between insurers carrying on long-term business and insurers carrying on general business. There are six classifications of insurers carrying on general business, with Class 4 insurers subject to the strictest regulation. Arch Re Bermuda is registered as both a long-term insurer and a Class 4 insurer in Bermuda and is regulated as such under the Insurance Act.

Cancellation of Insurer's Registration. An insurer's registration may be canceled by the BMA on certain grounds specified in the Insurance Act, including failure of the insurer to comply with its obligations under the Insurance Act or if, in the opinion of the BMA, the insurer has not been carrying on business in accordance with sound insurance principles. We believe we are in compliance with applicable regulations under the Insurance Act.

Principal Representative. An insurer is required to maintain a principal office in Bermuda and to appoint and maintain a principal representative in Bermuda. It is the duty of the principal representative upon reaching the view that there is a likelihood of the insurer for which the principal representative acts becoming insolvent or that a reportable "event" has, to the principal representative's knowledge, occurred or is believed to have occurred, to immediately notify the BMA verbally and to make a report in writing to the BMA within 14 days of the prior verbal notification setting out all the particulars of the case that are available to the principal representative.

Table of Contents

Approved Independent Auditor. A Class 4 insurer must appoint an independent auditor who annually audits and reports on the insurer's financial statements prepared under generally accepted accounting principles or international financial reporting standards ("GAAP financial statements") and statutory financial statements and the statutory financial return of the insurer, all of which, in the case of Arch Re Bermuda, are required to be filed annually with the BMA. The independent auditor must be approved by the BMA.

Approved Actuary. Arch Re Bermuda, as a registered long-term insurer, is required to submit an annual actuary's certificate when filing its statutory financial returns. The actuary, who is normally a qualified life actuary, must be approved by the BMA.

Approved Loss Reserve Specialist. As a registered Class 4 insurer, Arch Re Bermuda is required to submit an opinion of its approved loss reserve specialist with its statutory financial return in respect of its loss and loss expense provisions. The loss reserve specialist, who will normally be a qualified casualty actuary, must be approved by the BMA.

Annual Financial Statements and Annual Statutory Financial Return. Arch Re Bermuda must prepare annual statutory financial statements as prescribed in the Insurance Act, which are distinct from the annual GAAP basis financial statements referred to below. Arch Re Bermuda is also required to prepare and file a statutory financial return with the BMA. The statutory financial return for a Class 4 insurer includes, among other matters, a report of the approved independent auditor on the statutory financial statements of such insurer, solvency certificates, the statutory financial statements themselves, the opinion of the loss reserve specialist and a schedule of reinsurance ceded. Arch Re Bermuda is also required to file audited GAAP basis annual financial statements, which must be made available to the public, and a risk based capital model called the Bermuda Solvency Capital Requirement ("BSCR") model described below. All filings must be registered with the BMA within four months of the end of the relevant financial year (unless specifically extended upon application to the BMA).

Minimum Solvency Margin, Enhanced Capital Requirement and Restrictions on Dividends and Distributions. Under the Insurance Act, Arch Re Bermuda must ensure that the value of its general business assets exceeds the amount of its general business liabilities by an amount greater than the prescribed minimum solvency margin and enhanced capital requirement. As a Class 4 insurer, Arch Re Bermuda:

is required, with respect to its general business, to maintain a minimum solvency margin equal to the greatest of (A) \$100 million, (B) 50% of net premiums written (being gross premiums written less any premiums ceded by Arch Re Bermuda but Arch Re Bermuda may not deduct more than 25% of gross premiums when computing net premiums written), and (C) 15% of net discounted aggregate losses and loss expense provisions and other insurance reserves;

is required to maintain available statutory capital and surplus to an amount that is equal to or exceeds the target capital levels based on enhanced capital requirements calculated using the BSCR model. The BSCR model is a risk based capital model introduced by the BMA that measures risk and determines enhanced capital requirements and a target capital level (defined as 120% of the enhanced capital requirement) based on Arch Re Bermuda's statutory financial statements. The BSCR model includes a schedule of fixed income investments by rating categories, a schedule of net reserves for losses and loss expense provisions by statutory line of business, a schedule of net premiums written by statutory line of business, risk management schedules, a schedule of fixed income securities and stress and scenario testing;

is prohibited from declaring or paying any dividends during any financial year if it is in breach of its enhanced capital requirement, solvency margin or minimum liquidity ratio or if the declaration or payment of such dividends would cause such a breach (if it has failed to meet its

Table of Contents

minimum solvency margin or minimum liquidity ratio on the last day of any financial year, Arch Re Bermuda will be prohibited, without the approval of the BMA, from declaring or paying any dividends during the next financial year);

is prohibited from declaring or paying in any financial year dividends of more than 25% of its total statutory capital and surplus (as shown on its previous financial year's statutory balance sheet) unless it files (at least 7 days before payment of such dividends) with the BMA an affidavit stating that it will continue to meet the required margins;

is prohibited, without the approval of the BMA, from reducing by 15% or more its total statutory capital as set out in its previous year's financial statements and any application for such approval must include an affidavit stating that it will continue to meet the required margins;

is required, at any time it fails to meet its enhanced capital requirement or solvency margin, to file with the BMA a written report containing certain information;

is required to establish and maintain a long-term business fund; and

is required to obtain a certain certification from its approved actuary prior to declaring or paying any dividends and such certificate will not be given unless the value of its long-term business assets exceeds its long-term business liabilities, as certified by its approved actuary, by the amount of the dividend and at least \$250,000. The amount of any such dividend shall not exceed the aggregate of the excess referenced in the preceding sentence and other funds properly available for the payment of dividends, being funds arising out of its business, other than its long-term business.

Minimum Liquidity Ratio. The Insurance Act provides a minimum liquidity ratio for general business insurers such as Arch Re Bermuda. An insurer engaged in general business is required to maintain the value of its relevant assets at not less than 75% of the amount of its relevant liabilities. Relevant assets include cash and time deposits, quoted investments, unquoted bonds and debentures, first liens on real estate, investment income due and accrued, accounts and premiums receivable and reinsurance balances receivable. The relevant liabilities are total general business insurance reserves and total other liabilities less deferred income tax and sundry liabilities (by interpretation, those not specifically defined).

Long-Term Business Fund. An insurer carrying on long-term business is required to keep its accounts in respect of its long-term business separate from any accounts kept in respect of any other business and all receipts of its long-term business form part of its long-term business fund. No payment may be made directly or indirectly from an insurer's long-term business fund for any purpose other than a purpose related to the insurer's long-term business, unless such payment can be made out of any surplus certified by the insurer's approved actuary to be available for distribution otherwise than to policyholders. Arch Re Bermuda may not declare or pay a dividend to any person other than a policyholder unless the value of the assets in its long-term business fund, as certified by its approved actuary, exceeds the liabilities of the insurer's long-term business (as certified by the insurer's approved actuary) by the amount of the dividend and at least the \$250,000 minimum solvency margin prescribed by the Insurance Act, and the amount of any such dividend may not exceed the aggregate of that excess (excluding the said \$250,000) and any other funds properly available for payment of dividends, such as funds arising out of business of the insurer other than long-term business.

Restrictions on Transfer of Business and Winding-Up. Arch Re Bermuda, as a long-term insurer, is subject to the following provisions of the Insurance Act:

all or any part of the long-term business, other than long-term business that is reinsurance business, may be transferred only with and in accordance with the sanction of the applicable Bermuda court; and

Table of Contents

an insurer or reinsurer carrying on long-term business may only be wound-up or liquidated by order of the applicable Bermuda court, and this may increase the length of time and costs incurred in the winding-up of Arch Re Bermuda when compared with a voluntary winding-up or liquidation.

Supervision, Investigation and Intervention. The BMA may appoint an inspector with extensive powers to investigate the affairs of an insurer if the BMA believes that an investigation is required in the interest of the insurer's policyholders or persons who may become policyholders. In order to verify or supplement information otherwise provided to the BMA, the BMA may direct an insurer to produce documents or information relating to matters connected with the insurer's business.

If it appears to the BMA that there is a risk of the insurer becoming insolvent, or that it is in breach of the Insurance Act or any conditions imposed upon its registration, the BMA may, among other things, direct the insurer (1) not to take on any new insurance business, (2) not to vary any insurance contract if the effect would be to increase the insurer's liabilities, (3) not to make certain investments, (4) to realize certain investments, (5) to maintain in, or transfer to the custody of, a specified bank, certain assets, (6) not to declare or pay any dividends or other distributions or to restrict the making of such payments, (7) to limit its premium income, (8) not to enter into specified transactions with any specified person or persons of a specified class, (9) to provide such written particulars relating to the financial circumstances of the insurer as the BMA thinks fit, (10) to obtain the opinion of a loss reserve specialist and submit it to the BMA and/or (11) to remove a controller or officer.

Shareholder Controllers. Any person who, directly or indirectly, becomes a holder of at least 10%, 20%, 33% or 50% of the common shares of ACGL must notify the BMA in writing within 45 days of becoming such a holder or 30 days from the date such person has knowledge of having such a holding, whichever is later. The BMA may, by written notice, object to such a person if it appears to the BMA that the person is not fit and proper to be such a holder. The BMA may require the holder to reduce their holding of common shares in ACGL and direct, among other things, that voting rights attaching to the common shares shall not be exercisable. A person that does not comply with such a notice or direction from the BMA will be guilty of an offense.

For so long as ACGL has as a subsidiary an insurer registered under the Insurance Act, the BMA may at any time, by written notice, object to a person holding 10% or more of its common shares if it appears to the BMA that the person is not or is no longer fit and proper to be such a holder. In such a case, the BMA may require the shareholder to reduce its holding of common shares in ACGL and direct, among other things, that such shareholder's voting rights attaching to the common shares shall not be exercisable. A person who does not comply with such a notice or direction from the BMA will be guilty of an offense.

Certain Bermuda Law Considerations

ACGL and Arch Re Bermuda have been designated as non-resident for exchange control purposes by the BMA and are required to obtain the permission of the BMA for the issue and transfer of all of their shares. The BMA has given its consent for:

the issue and transfer of ACGL's shares, up to the amount of its authorized capital from time to time, to and among persons that are non-residents of Bermuda for exchange control purposes; and

the issue and transfer of up to 20% of ACGL's shares in issue from time to time to and among persons resident in Bermuda for exchange control purposes.

Table of Contents

Transfers and issues of ACGL's common shares to any resident in Bermuda for exchange control purposes may require specific prior approval under the Exchange Control Act 1972. Arch Re Bermuda's common shares cannot be issued or transferred without the consent of the BMA. Because we are designated as non-resident for Bermuda exchange control purposes, we are allowed to engage in transactions, and to pay dividends to Bermuda non-residents who are holders of our common shares, in currencies other than the Bermuda Dollar.

In accordance with Bermuda law, share certificates are issued only in the names of corporations or individuals. In the case of an applicant acting in a special capacity (for example, as an executor or trustee), certificates may, at the request of the applicant, record the capacity in which the applicant is acting. Notwithstanding the recording of any such special capacity, we are not bound to investigate or incur any responsibility in respect of the proper administration of any such estate or trust. We will take no notice of any trust applicable to any of our common shares whether or not we have notice of such trust.

ACGL and Arch Re Bermuda are incorporated in Bermuda as "exempted companies." As a result, they are exempt from Bermuda laws restricting the percentage of share capital that may be held by non-Bermudians, but they may not participate in certain business transactions, including (1) the acquisition or holding of land in Bermuda (except that required for their business and held by way of lease or tenancy for terms of not more than 50 years) without the express authorization of the Bermuda legislature, (2) the taking of mortgages on land in Bermuda to secure an amount in excess of \$50,000 without the consent of the Minister of Finance, (3) the acquisition of any bonds or debentures secured by any land in Bermuda, other than certain types of Bermuda government securities or (4) the carrying on of business of any kind in Bermuda, except in furtherance of their business carried on outside Bermuda or under license granted by the Minister of Finance. While an insurer is permitted to reinsure risks undertaken by any company incorporated in Bermuda and permitted to engage in the insurance and reinsurance business, generally it is not permitted without a special license granted by the Minister of Finance to insure Bermuda domestic risks or risks of persons of, in or based in Bermuda.

ACGL and Arch Re Bermuda also need to comply with the provisions of The Bermuda Companies Act 1981, as amended (the "Companies Act") regulating the payment of dividends and making distributions from contributed surplus. A company shall not declare or pay a dividend, or make a distribution out of contributed surplus, if there are reasonable grounds for believing that: (a) the company is, or would after the payment be, unable to pay its liabilities as they become due; or (b) the realizable value of the company's assets would thereby be less than the aggregate of its liabilities and its issued share capital and share premium accounts. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Financial Condition, Liquidity and Capital Resources Liquidity and Capital Resources" and note 17, "Statutory Information," of the notes accompanying our financial statements.

Under Bermuda law, only persons who are Bermudians, spouses of Bermudians, holders of a permanent resident's certificate or holders of a working resident's certificate ("exempted persons") may engage in gainful occupation in Bermuda without an appropriate governmental work permit. Our success may depend in part upon the continued services of key employees in Bermuda. Certain of our current key employees are not exempted persons and, as such, require specific approval to work for us in Bermuda. A work permit may be granted or extended upon showing that, after proper public advertisement, no exempted person is available who meets the minimum standards reasonably required by the employer. The Bermuda government has a policy that places a six-year term limit on individuals with work permits, subject to certain exemptions for key employees.

Table of Contents

United Kingdom Insurance Regulation

General. The Financial Services Authority (the "FSA") regulates insurance and reinsurance companies operating in the U.K. under the Financial Services and Markets Act 2000 (the "FSMA"). In May 2004, Arch Insurance Company Europe was licensed and authorized by the FSA. It holds the relevant permissions for the classes of insurance business which it underwrites in the U.K. In 2009, AUAL was licensed and authorized by the FSA and the Lloyd's Franchise Board. AUAL holds the relevant permissions for the classes of insurance business which are underwritten in the U.K. by the Arch Syndicate 2012. Arch Syndicate 2012 has one member, Arch Syndicate Investments Ltd. All U.K. companies are also subject to a range of statutory provisions, including the laws and regulations of the Companies Acts 1985 and 2006 (as amended) (the "U.K. Companies Acts").

The primary statutory goals of the FSA are to maintain and promote confidence in the U.K. financial system, secure the appropriate degree of protection for consumers and reduce financial crime. The FSA regulatory regime imposes risk management, solvency and capital requirements on U.K. insurance companies. The FSA has broad authority to supervise and regulate insurance companies which extends to enforcement of the provisions of the FSMA and intervention in the operations of an insurance company. The FSA regime is based on principles from which all of its rules and guidance derive. Among these principles, the FSA increasingly emphasizes a "culture of compliance" in those firms it regulates. The FSA carries out regular Advanced Risk Responsive Operating Framework ("ARROW") assessments of regulated firms to ensure that compliance with its rules and guidance. The FSA conducted risk assessments of Arch Insurance Company Europe in 2006 and 2008, and will continue to do so again on a regular schedule, including the operations of AUAL and the Arch Syndicate 2012 in the future. The assessments provided the FSA's views on Arch Insurance Company Europe's risk profile and its regulatory capital requirements. In some cases, the FSA may require remedial action or adjustments to a company's management, operations, capital requirements, claims management or business plan. The FSA has announced that greater focus will be placed on senior management arrangements, systems and controls, the fair treatment of clients and making further progress towards the development of enhanced risk-based minimum capital requirements for non life insurance companies, working together with the regulatory bodies of the Member States of the European Union ("EU") and the European Commission, which acts as the initiator of action and executive body of the EU.

Lloyd's Supervision. The operations of AUAL and related Arch Syndicate 2012 and its corporate member, Arch Syndicate Investments Ltd ("ASIC"), are subject to the byelaws and regulations made by (or on behalf of) the Council of Lloyd's, and requirements made under those byelaws. The Council of Lloyd's, established in 1982 by Lloyd's Act 1982, has overall responsibility and control of Lloyd's. Those byelaws, regulations and requirements provide a framework for the regulation of the Lloyd's market, including specifying conditions in relation to underwriting and claims operations of Lloyd's participants. Lloyd's is also subject to the provisions of the FSMA and is itself authorized and regulated as an insurer by the FSA. Those entities acting within the Lloyd's market are required to comply with the requirements of the FSMA and provisions of the FSA's rules, although the FSA has delegated certain of its powers, including some of those relating to prudential requirements, to Lloyd's. ASIC, as a member of Lloyd's, is required to contribute 0.5% of Arch Syndicate 2012's premium income limit for each year of account to the Lloyd's central fund. The Lloyd's central fund is available if members of Lloyd's assets are not sufficient to meet claims for which the member is liable. As a member of Lloyd's ASIC may also be required to contribute to the central fund by way of a supplement to a callable lawyer of up to 3% of Arch Syndicate 2012's premium income limit for the relevant year of account.

Financial Resources. Arch Insurance Europe is required to demonstrate to the FSA that it has adequate financial assets to meet the financial resources requirement for its category. On a periodic basis, Arch Insurance Europe is required to provide the FSA and Lloyd's with its own risk-based assessment of its capital needs, taking into account comprehensive risk factors, including market, credit,

Table of Contents

operational, liquidity and group risks to generate a revised calculation of its expected liabilities which, in turn, enable the FSA to provide individual capital guidance to Arch Insurance Europe. Arch Insurance Europe's surplus is above the risk-based capital threshold allowed by the FSA's individual capital assessment of Arch Insurance Europe. The FSA requires that Arch Insurance Europe maintain a margin of solvency calculation based on the classes of business for which it is authorized and within its premium income projections applied to its worldwide general business.

Reporting Requirements. Like all U.K. companies, Arch Insurance Europe must file and submit its annual audited financial statements and related reports to the Registrar of Companies under the U.K. Companies Acts together with an annual return of certain core corporate information and changes from the prior year. This requirement is in addition to the regulatory returns required to be filed annually with the FSA and, in the case of AUAL and ASIC, Lloyd's.

Restrictions on Payment of Dividends. Under English law, all companies are restricted from declaring a dividend to their shareholders unless they have "profits available for distribution." The calculation as to whether a company has sufficient profits is based on its accumulated realized profits minus its accumulated realized losses. U.K. insurance regulatory laws do not prohibit the payment of dividends, but the FSA requires that insurance companies maintain certain solvency margins and may restrict the payment of a dividend by Arch Insurance Company Europe, AUAL or ASIC. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Financial Condition, Liquidity and Capital Resources Liquidity and Capital Resources" and note 17, "Statutory Information," of the notes accompanying our financial statements.

European Union Considerations. Through their respective authorizations in the U.K., a Member State of the EU, Arch Insurance Company Europe's and AUAL's authorizations are recognized throughout the European Economic Area ("EEA"), subject only to certain notification and application requirements. This authorization enables Arch Insurance Company Europe and AUAL to establish a branch in any other Member State of the EU, where it will be subject to the insurance regulations of each such Member State with respect to the conduct of its business in such Member State, but remain subject only to the financial and operational supervision by the FSA. The framework for the establishment of branches in Member States of the EU other than the U.K. was generally set forth, and remains subject to, directives adopted by the European Council, the legislative body of the EU, which directives are then implemented in each Member State. Arch Insurance Company Europe currently has branches in Germany, Italy, Spain and Denmark, and may establish branches in other Member States of the EU in the future. Further, through its authorizations in an EU Member State, Arch Insurance Company Europe and AUAL have the freedom to provide insurance services anywhere in the EEA subject to compliance with certain rules governing such provision, including notification to the FSA.

In addition, the European Commission, which acts as the initiator of action and executive body of the EU, has introduced a new directive on insurance regulation and solvency requirements known as Solvency II. This directive was approved by the European Parliament in April 2009 and adopted by the European Council in November 2009. Currently, the European Commission, with the assistance of the Committee of European Insurance Occupational Pensions Supervisors, is advising the European Commission on implementation of the Directive and undertaking a three stage process of consultation with Member State regulators and insurance firms. This is following a time table that envisages implementation of Solvency II from October 1, 2012. Solvency II is a new regulatory regime which will impose economic risk-based solvency requirements across all EU Member States and consists of three pillars: (1) Pillar I quantitative capital requirements, based on a valuation of the entire balance sheet; (2) Pillar II qualitative regulatory review, which includes governance, internal controls, enterprise risk management and supervisory review process and (3) Pillar III market discipline, which is accomplished through reporting of the insurer's financial condition to regulators and the public. Arch Insurance Europe will be required to comply with Solvency II requirements.

Table of Contents

Canada Insurance Regulation

The Canadian branch office of Arch Insurance is subject to federal, as well as provincial and territorial, regulation in Canada. The Office of the Superintendent of Financial Institutions ("OSFI") is the federal regulatory body that, under the Insurance Companies Act (Canada), regulates federal Canadian and non-Canadian insurance companies operating in Canada. The primary goal of OSFI is to supervise the safety and soundness of insurance companies with the aim of securing the appropriate level of protection of insureds by imposing risk management, solvency and capital requirements on such companies. In addition, the Canadian branch is subject to regulation in the provinces and territories in which it underwrites insurance, and the primary goal of insurance regulation at the provincial and territorial levels is to govern the market conduct of insurance companies. The Canadian branch is licensed to carry on insurance business by OSFI and in each province and territory, except for Prince Edward Island.

Under the Insurance Companies Act (Canada), the Canadian branch office is required to maintain an adequate margin of assets over liabilities in Canada, calculated in accordance with a test promulgated by OSFI called the Branch Adequacy of Assets Test (or BAAT). The Canadian branch office is also required to file financial information with OSFI on an ongoing basis, including annual financial statements and other returns and quarterly unaudited financial statements. The Canadian branch office's appointed actuary must report annually on the adequacy of the branch's reserves. OSFI's continuing supervision includes analysis of this information and periodic examinations of the Canadian branch office. OSFI has implemented a risk-based methodology for assessing insurance companies operating in Canada known as its "Supervisory Framework". In applying the Supervisory Framework, OSFI considers the inherent risks of the business and the quality of risk management for each significant activity of operating entity.

Ireland Reinsurance Regulation

General. The Irish Financial Services Regulatory Authority ("IFSRA") regulates insurance and reinsurance companies authorized in Ireland, including Arch Re Europe, which was licensed and authorized by IFSRA as a non-life reinsurer in October 2008 and as a life reinsurer in November 2009.

Arch Re Europe must also comply with the European Communities (Reinsurance) Regulations, 2006 rules made thereunder and, insofar as relevant to reinsurance, the Irish Insurance Acts 1909 to 2000, regulations promulgated thereunder, regulations relating to reinsurance business promulgated under the European Communities Act 1972, the Irish Central Bank Acts 1942 to 2004 as amended, regulations promulgated thereunder and directions, guidelines and codes of conduct issued by IFSRA. Irish authorized reinsurers, such as Arch Re Europe, are also subject to the general body of Irish laws and regulations including the provisions of the Companies Acts 1963-2009.

Financial Resources. Arch Re Europe is required to maintain reserves, particularly in respect of underwriting liabilities and a solvency margin as provided for in the European Communities (Reinsurance) Regulations, 2006, related guidance and the European Communities Insurance Accounts Regulations, 1996. Assets constituting statutory reserves must comply with certain principles including obligations to secure sufficiency, liquidity, security, quality, profitability and currency matching of investments. Statutory reserves must be actuarially certified annually.

Reporting Requirements. Like most Irish companies, Arch Re Europe must file and submit its annual audited financial statements and related reports to the Registrar of Companies ("Registrar") under the Companies Acts 1963-2009 together with an annual return of certain core corporate information. Changes to core corporate information during the year must also be notified to the Registrar. These requirements are in addition to the regulatory returns required to be filed annually with IFSRA.

Table of Contents

Restrictions on Payment of Dividends. Under Irish company law, Arch Re Europe is permitted to make distributions only out of profits available for distribution. A company's profits available for distribution are its accumulated, realized profits, so far as not previously utilized by distribution or capitalization, less its accumulated, realized losses, so far as not previously written off in a reduction or reorganization of capital duly made. Further, IFSRA has powers to intervene if a dividend payment were to lead to a breach of regulatory capital requirements. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Financial Condition, Liquidity and Capital Resources Liquidity and Capital Resources" and note 17, "Statutory Information," of the notes accompanying our financial statements.

European Union Considerations. As a reinsurance company authorized in Ireland, a Member State of the EU, Arch Re Europe's authorization is recognized throughout the EEA, subject only to any notification requirements imposed by other EU Member States. This authorization enables Arch Re Europe to conduct reinsurance services, or to establish a branch, in any other Member State of the EEA. Although, in doing so, it may be subject to the laws of such Member States with respect to the conduct of its business in such Member State, company law registrations and other matters, it will remain subject to financial and operational supervision by IFSRA only. Arch Re Europe has branches in Denmark and, outside the EEA, in Switzerland.

Switzerland Reinsurance Regulation

In November 2006, Arch Re Bermuda opened a branch office in Zurich, Switzerland named Arch Reinsurance Ltd., Hamilton (Bermuda), European Branch Zurich. In December 2008, Arch Re Europe opened Arch Re Europe Swiss Branch as a branch office. Upon the opening of this branch in the fourth quarter of 2008, the operations of Arch Re Bermuda Swiss Branch were transferred to Arch Re Europe Swiss Branch. Arch Re Bermuda Swiss Branch was formally de-registered from the commercial register of the Canton of Zurich in early 2009. As both Arch Re Europe and Arch Re Bermuda are domiciled outside of Switzerland and their activities were and are limited to reinsurance, their respective branches in Switzerland were and are not required to be licensed by the Swiss insurance regulatory authorities.

European Union Insurance and Reinsurance Regulation

The single system established in the EU for regulation and supervision of the general insurance sector and its single passport regime had until 2007 applied only to direct insurance, and there was no common regulation of reinsurance in the EU. However, direct insurers established in a Member State of the EEA who were also authorized by their domestic regulatory authorities to transact reinsurance have had freedom to establish branches in and provide insurance services to all EEA states and that freedom has in practice been extended to their reinsurance activities. In December 2005, the EU published the Reinsurance Directive (the "Directive") as a first step in harmonization of reinsurance regulation in the single market. Member States of the EU and the EEA were required to implement the Directive by December 2007. Nearly all Member States have implemented the Directive, although in a few cases some further legislation is necessary. Pure reinsurers established in a Member State of the EU now have freedom to establish branches in and provide services to virtually all EEA states under a regime comparable to that enjoyed by direct insurers and they will be subject to similar rules in relation to licensing and financial supervision.

Arch Insurance Company Europe and AUAL, being established in the U.K. and authorized by the FSA, are able, subject to regulatory notifications and there being no objection from the FSA and the Member States concerned, to establish branches and provide insurance and reinsurance services in all EEA Member States. Arch Re Europe, being established in Ireland and authorized by the IFSRA to write reinsurance, is able, subject to similar regulatory notifications and there being no objection from the IFSRA and the Member States concerned, to establish branches and provide reinsurance services in

Table of Contents

those EEA states which have implemented the Directive. The Directive itself does not prohibit EEA insurers from obtaining reinsurance from reinsurers licensed outside the EEA, such as Arch Re Bermuda. As such, Arch Re Bermuda may do business from Bermuda with insurers in EEA Member States, but it may not directly operate its reinsurance business within the EEA. Unless agreement is reached between the European Commission and Bermuda to accord Bermuda-based reinsurers with market access on the basis of the equivalent nature of Bermuda regulation, each individual EEA Member State may impose conditions on reinsurance provided by Bermuda-based reinsurers which could restrict their future provision of reinsurance to the EEA Member State concerned. A number of EEA Member States currently restrict the extent to which Bermudian reinsurers may promote their services in those Member States and a few have certain prohibitions on the purchase of insurance from reinsurers not authorized in the EEA.

TAX MATTERS

The following summary of the taxation of ACGL and the taxation of our shareholders is based upon current law and is for general information only. Legislative, judicial or administrative changes may be forthcoming that could affect this summary.

The following legal discussion (including and subject to the matters and qualifications set forth in such summary) of certain tax considerations (a) under " Taxation of ACGL Bermuda" and " Taxation of Shareholders Bermuda Taxation" is based upon the advice of Conyers Dill & Pearman, Hamilton, Bermuda and (b) under " Taxation of ACGL United States," " Taxation of Shareholders United States Taxation," " Taxation of Our U.S. Shareholders" and " United States Taxation of Non-U.S. Shareholders" is based upon the advice of Cahill Gordon & Reindel LLP, New York, New York (the advice of such firms does not include accounting matters, determinations or conclusions relating to the business or activities of ACGL). The summary is based upon current law and is for general information only. The tax treatment of a holder of our shares (common shares, series A non-cumulative preferred shares or series B non-cumulative preferred shares), or of a person treated as a holder of our shares for U.S. federal income, state, local or non-U.S. tax purposes, may vary depending on the holder's particular tax situation. Legislative, judicial or administrative changes or interpretations may be forthcoming that could be retroactive and could affect the tax consequences to us or to holders of our shares.

Taxation of ACGL

Bermuda

Under current Bermuda law, ACGL is not subject to tax on income or capital gains. ACGL has obtained from the Minister of Finance under the Exempted Undertakings Tax Protection Act 1966 an assurance that, in the event that Bermuda enacts legislation imposing tax computed on profits, income, any capital asset, gain or appreciation, or any tax in the nature of estate duty or inheritance, the imposition of any such tax shall not be applicable to ACGL or to any of our operations or our shares, debentures or other obligations until March 28, 2016. We could be subject to taxes in Bermuda after that date. This assurance will be subject to the proviso that it is not to be construed so as to prevent the application of any tax or duty to such persons as are ordinarily resident in Bermuda (we are not so currently affected) or to prevent the application of any tax payable in accordance with the provisions of the Land Tax Act 1967 or otherwise payable in relation to any property leased to us or our insurance subsidiary. We pay annual Bermuda government fees, and our Bermuda insurance and reinsurance subsidiary pays annual insurance license fees. In addition, all entities employing individuals in Bermuda are required to pay a payroll tax and other sundry taxes payable, directly or indirectly, to the Bermuda government.

Table of Contents

United States

ACGL and its non-U.S. subsidiaries intend to conduct their operations in a manner that will not cause them to be treated as engaged in a trade or business in the United States and, therefore, will not be required to pay U.S. federal income taxes (other than U.S. excise taxes on insurance and reinsurance premium and withholding taxes on dividends and certain other U.S. source investment income). However, because definitive identification of activities which constitute being engaged in a trade or business in the U.S. is not provided by the Internal Revenue Code of 1986, as amended (the "Code"), or regulations or court decisions, there can be no assurance that the U.S. Internal Revenue Service will not contend successfully that ACGL or its non-U.S. subsidiaries are or have been engaged in a trade or business in the United States. A foreign corporation deemed to be so engaged would be subject to U.S. income tax, as well as the branch profits tax, on its income, which is treated as effectively connected with the conduct of that trade or business unless the corporation is entitled to relief under the permanent establishment provisions of a tax treaty. Such income tax, if imposed, would be based on effectively connected income computed in a manner generally analogous to that applied to the income of a domestic corporation, except that deductions and credits generally are not permitted unless the foreign corporation has timely filed a U.S. federal income tax return in accordance with applicable regulations. Penalties may be assessed for failure to file tax returns. The 30% branch profits tax is imposed on net income after subtracting the regular corporate tax and making certain other adjustments.

Under the income tax treaty between Bermuda and the United States (the "Treaty"), ACGL's Bermuda insurance subsidiaries will be subject to U.S. income tax on any insurance premium income found to be effectively connected with a U.S. trade or business only if that trade or business is conducted through a permanent establishment in the United States. No regulations interpreting the Treaty have been issued. While there can be no assurances, ACGL does not believe that any of its Bermuda insurance subsidiaries has a permanent establishment in the United States. Such subsidiaries would not be entitled to the benefits of the Treaty if (i) less than 50% of ACGL's shares were beneficially owned, directly or indirectly, by Bermuda residents or U.S. citizens or residents, or (ii) any such subsidiary's income were used in substantial part to make disproportionate distributions to, or to meet certain liabilities to, persons who are not Bermuda residents or U.S. citizens or residents. While there can be no assurances, ACGL believes that its Bermuda insurance subsidiaries are eligible for Treaty benefits.

The Treaty clearly applies to premium income, but may be construed as not protecting investment income. If ACGL's Bermuda insurance subsidiaries were considered to be engaged in a U.S. trade or business and were entitled to the benefits of the Treaty in general, but the Treaty were not found to protect investment income, a portion of such subsidiaries' investment income could be subject to U.S. federal income tax.

Non-U.S. insurance companies carrying on an insurance business within the United States have a certain minimum amount of effectively connected net investment income, determined in accordance with a formula that depends, in part, on the amount of U.S. risk insured or reinsured by such companies. If any of ACGL's non-U.S. insurance subsidiaries is considered to be engaged in the conduct of an insurance business in the United States, a significant portion of such company's investment income could be subject to U.S. income tax.

Non-U.S. corporations not engaged in a trade or business in the United States are nonetheless subject to U.S. income tax on certain "fixed or determinable annual or periodic gains, profits and income" derived from sources within the United States as enumerated in Section 881(a) of the Code (such as dividends and certain interest on investments), subject to exemption under the Code or reduction by applicable treaties.

Table of Contents

The United States also imposes an excise tax on insurance and reinsurance premiums paid to non-U.S. insurers or reinsurers with respect to risks located in the United States. The rates of tax, unless reduced by an applicable U.S. tax treaty, are 4% for non-life insurance premiums and 1% for life insurance and all reinsurance premiums.

United Kingdom

Our U.K. subsidiaries are companies incorporated in the U.K. and are therefore resident in the U.K. for corporation tax purposes and will be subject to U.K. corporate tax on their respective worldwide profits. The current rate of U.K. corporation tax is 28% on profits.

Canada

In January 2005, Arch Insurance received its federal license to commence underwriting in Canada and began writing business in the first quarter of 2005 through its branch operation. The branch operation is taxed on net business income earned in Canada. The general federal corporate income tax rate in Canada is currently 18%. The general federal corporate income tax rate in Canada is legislated to be reduced to 16.5% in 2011 and to 15% in 2012. Provincial and territorial corporate income tax rates are added to the general federal corporate income tax rate and generally vary between 10% and 16.0%. Canadian income taxes are also creditable to our U.S. operations.

Ireland

Arch Re Europe was licensed and authorized by IFSRA as a non-life reinsurer in October 2008 and as a life reinsurer in November 2009. Arch Re Europe is incorporated and resident in Ireland for corporation tax purposes and will be subject to Irish corporate tax on its worldwide profits, including profits of its Swiss branch operations. Any Swiss tax payable will be creditable against Arch Re Europe's Irish corporate tax liability. The current rate of Irish corporation tax is 12.5%.

Switzerland

Arch Re Bermuda Swiss Branch was established as a branch office of Arch Re Bermuda, but was de-registered from the commercial register of the Canton of Zurich in the first quarter of 2009. Its operations were transferred to Arch Re Europe's Swiss branch in the fourth quarter of 2008. Arch Re Bermuda Swiss Branch was, and Arch Re Europe Swiss Branch is, subject to Swiss corporation tax on the profit which is allocated to the branch. Under a mixed company ruling, the effective tax rate is expected to be between 10.2% and 12.6%. The annual capital tax on the equity which is allocated to Arch Re Bermuda Swiss Branch is approximately .035%. The same tax treatment will apply to Arch Re Europe Swiss Branch. The mixed company ruling is currently under review by the competent tax authority so that from January 1, 2010, the effective tax rate may be approximately 21.17% for Swiss corporation tax on the profit and approximately .172% for the annual capital tax.

Denmark

Arch Re Denmark, established as a subsidiary of Arch Re Bermuda, is subject to Danish corporation taxes on its profits at a rate of 25%.

Taxation of Shareholders

The following summary sets forth certain United States federal income tax considerations related to the purchase, ownership and disposition of our common shares and our series A non-cumulative preferred shares and our series B non-cumulative preferred shares (collectively referred to as the "preferred shares"). Unless otherwise stated, this summary deals only with shareholders ("U.S. Holders") that are United States Persons (as defined below) who hold their common shares and

Table of Contents

preferred shares as capital assets and as beneficial owners. The following discussion is only a general summary of the United States federal income tax matters described herein and does not purport to address all of the United States federal income tax consequences that may be relevant to a particular shareholder in light of such shareholder's specific circumstances. In addition, the following summary does not describe the United States federal income tax consequences that may be relevant to certain types of shareholders, such as banks, insurance companies, regulated investment companies, real estate investment trusts, financial asset securitization investment trusts, dealers in securities or traders that adopt a mark-to-market method of tax accounting, tax exempt organizations, expatriates or persons who hold the common shares or preferred shares as part of a hedging or conversion transaction or as part of a straddle, who may be subject to special rules or treatment under the Code. This discussion is based upon the Code, the Treasury regulations promulgated thereunder and any relevant administrative rulings or pronouncements or judicial decisions, all as in effect on the date of this annual report and as currently interpreted, and does not take into account possible changes in such tax laws or interpretations thereof, which may apply retroactively. This discussion does not include any description of the tax laws of any state or local governments within the United States, or of any foreign government, that may be applicable to our common shares or preferred shares or the shareholders. Persons considering making an investment in the common shares or preferred shares should consult their own tax advisors concerning the application of the United States federal tax laws to their particular situations as well as any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction prior to making such investment.

If a partnership holds our common shares or preferred shares, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our common shares or preferred shares, you should consult your tax advisor.

For purposes of this discussion, the term "United States Person" means:

a citizen or resident of the United States,

a corporation or entity treated as a corporation created or organized in or under the laws of the United States, or any political subdivision thereof,

an estate the income of which is subject to United States federal income taxation regardless of its source,

a trust if either (x) a court within the United States is able to exercise primary supervision over the administration of such trust and one or more United States Persons have the authority to control all substantial decisions of such trust or (y) the trust has a valid election in effect to be treated as a United States Person for U.S. federal income tax purposes or

any other person or entity that is treated for U.S. federal income tax purposes as if it were one of the foregoing.

Bermuda Taxation

Currently, there is no Bermuda withholding tax on dividends paid by us.

United States Taxation

Taxation of Dividends. The preferred shares should be properly classified as equity rather than debt for U.S. federal income tax purposes. Subject to the discussions below relating to the potential application of the CFC and PFIC rules, as defined below, cash distributions, if any, made with respect to our common shares or preferred shares will constitute dividends for U.S. federal income tax purposes to the extent paid out of our current or accumulated earnings and profits (as computed using

Table of Contents

U.S. tax principles). If a U.S. Holder of our common shares or our preferred shares is an individual or other non-corporate holder, dividends paid, if any, to that holder in taxable years beginning before January 1, 2011 that constitute qualified dividend income will be taxable at the rate applicable for long-term capital gains (generally up to 15%), provided that such person meets a holding period requirement. Generally in order to meet the holding period requirement, the United States Person must hold the common shares for more than 60 days during the 121-day period beginning 60 days before the ex-dividend date and must hold preferred shares for more than 90 days during the 181-day period beginning 90 days before the ex-dividend date. Dividends paid, if any, with respect to common shares or preferred shares generally will be qualified dividend income, provided the common shares or preferred shares are readily tradable on an established securities market in the U.S. in the year in which the shareholder receives the dividend (which should be the case for shares that are listed on the NASDAQ Stock Market or the New York Stock Exchange) and ACGL is not considered to be a passive foreign investment company in either the year of the distribution or the preceding taxable year. No assurance can be given that the preferred shares will be considered readily tradable on an established securities market in the United States. See "Taxation of Our U.S. Shareholders" below. After December 31, 2010, qualified dividend income will no longer be taxed at the rate applicable for long-term capital gains unless Congress enacts legislation providing otherwise.

Distributions with respect to the common shares and the preferred shares will not be eligible for the dividends-received deduction allowed to U.S. corporations under the Code. To the extent distributions on our common shares and preferred shares exceed our earnings and profits, they will be treated first as a return of the U.S. Holder's basis in our common shares and our preferred shares to the extent thereof, and then as gain from the sale of a capital asset.

Sale, Exchange or Other Disposition. Subject to the discussions below relating to the potential application of the CFC and PFIC rules, holders of common shares and preferred shares generally will recognize capital gain or loss for U.S. federal income tax purposes on the sale, exchange or disposition of common shares or preferred shares, as applicable.

Redemption of Preferred Shares. A redemption of the preferred shares will be treated under section 302 of the Code as a dividend if we have sufficient earnings and profits, unless the redemption satisfies one of the tests set forth in section 302(b) of the Code enabling the redemption to be treated as a sale or exchange, subject to the discussion herein relating to the potential application of the CFC, RPII and PFIC rules. Under the relevant Code section 302(b) tests, the redemption should be treated as a sale or exchange only if it (1) is substantially disproportionate, (2) constitutes a complete termination of the holder's stock interest in us or (3) is "not essentially equivalent to a dividend." In determining whether any of these tests are met, shares considered to be owned by the holder by reason of certain constructive ownership rules set forth in the Code, as well as shares actually owned, must generally be taken into account. It may be more difficult for a United States Person who owns, actually or constructively by operation of the attribution rules, any of our other shares to satisfy any of the above requirements. The determination as to whether any of the alternative tests of section 302(b) of the Code is satisfied with respect to a particular holder of the preference shares depends on the facts and circumstances as of the time the determination is made.

Taxation of Our U.S. Shareholders

Controlled Foreign Corporation Rules

Under our bye-laws, the 9.9% voting restriction applicable to the Controlled Shares of a U.S. Person (as defined in our bye-laws) generally does not apply to certain of our investors. Depending upon the ownership of these investors and as a result of certain attribution rules, we and our foreign subsidiaries could be controlled foreign corporations ("CFCs"). That status as a CFC would not cause us or any of our subsidiaries to be subject to U.S. federal income tax. Such status also would have no

Table of Contents

adverse U.S. federal income tax consequences for any U.S. Holder that is considered to own less than 10% of the total combined voting power of our shares or those of our foreign subsidiaries. Only U.S. Holders that are considered to own 10% or more of the total combined voting power of our shares or those of our foreign subsidiaries (taking into account shares actually owned by such U.S. Holder as well as shares attributed to such U.S. Holder under the Code or the regulations thereunder) (a "10% U.S. Voting Shareholder") would be affected by our status as a CFC. The preferred shares generally should not be considered voting stock for purposes of determining whether a United States Person would be a "10% U.S. Voting Shareholder." The shares may, however, become entitled to vote (as a class along with any other class of preferred shares of ACGL then outstanding) for the election of two additional members of the board of directors of ACGL if ACGL does not declare and pay dividends for the equivalent of six or more dividend periods. In such case, the preferred shares should be treated as voting stock for as long as such voting rights continue. Our bye-laws are intended to prevent any U.S. Holder from being considered a 10% U.S. Voting Shareholder by limiting the votes conferred by the Controlled Shares (as defined in our bye-laws) of any U.S. Person to 9.9% of the total voting power of all our shares entitled to vote. However, because under our bye-laws certain funds associated with Warburg Pincus and Hellman & Friedman generally are entitled to vote their directly owned common shares in full, a U.S. Holder that is attributed (under the Code or the regulations thereunder) common shares owned by such funds may be considered a 10% U.S. Voting Shareholder. If you are a direct or indirect investor in a fund associated with Warburg Pincus or Hellman & Friedman, additional common shares could be attributed to you for purposes of determining whether you are considered to be a 10% U.S. Voting Shareholder. If we are a CFC, a U.S. Holder that is considered a 10% U.S. Voting Shareholder would be subject to current U.S. federal income taxation (at ordinary income tax rates) to the extent of all or a portion of the undistributed earnings and profits of ACGL and our subsidiaries attributable to "subpart F income" (including certain insurance premium income and investment income) and may be taxable at ordinary income tax rates on any gain realized on a sale or other disposition (including by way of repurchase or liquidation) of our shares to the extent of the current and accumulated earnings and profits attributable to such shares.

While our bye-laws are intended to prevent any member from being considered a 10% U.S. Voting Shareholder (except as described above), there can be no assurance that a U.S. Holder will not be treated as a 10% U.S. Voting Shareholder, by attribution or otherwise, under the Code or any applicable regulations thereunder. See "Risk Factors Risks Relating to Taxation U.S. persons who hold our common shares or preferred shares may be subject to U.S. income taxation at ordinary income rates on our undistributed earnings and profits."

Related Person Insurance Income Rules

Generally, we do not expect the gross "related person insurance income" ("RPII") of any of our non-U.S. subsidiaries to equal or exceed 20% of its gross insurance income in any taxable year for the foreseeable future and do not expect the direct or indirect insureds (and related persons) of any such subsidiary to directly or indirectly own 20% or more of either the voting power or value of our stock. Consequently, we do not expect any U.S. person owning common shares or preferred shares to be required to include in gross income for U.S. federal income tax purposes RPII income, but there can be no assurance that this will be the case.

Section 953(c)(7) of the Code generally provides that Section 1248 of the Code (which generally would require a U.S. Holder to treat certain gains attributable to the sale, exchange or disposition of common shares or preferred shares as a dividend) will apply to the sale or exchange by a U.S. shareholder of shares in a foreign corporation that is characterized as a CFC under the RPII rules if the foreign corporation would be taxed as an insurance company if it were a domestic corporation, regardless of whether the U.S. shareholder is a 10% U.S. Voting Shareholder or whether the corporation qualifies for either the RPII 20% ownership exception or the RPII 20% gross income

Table of Contents

exception. Although existing Treasury Department regulations do not address the question, proposed Treasury regulations issued in April 1991 create some ambiguity as to whether Section 1248 and the requirement to file Form 5471 would apply when the foreign corporation has a foreign insurance subsidiary that is a CFC for RPII purposes and that would be taxed as an insurance company if it were a domestic corporation. We believe that Section 1248 and the requirement to file Form 5471 will not apply to a less than 10% U.S. Shareholder because ACGL is not directly engaged in the insurance business. There can be no assurance, however, that the U.S. Internal Revenue Service will interpret the proposed regulations in this manner or that the Treasury Department will not take the position that Section 1248 and the requirement to file Form 5471 will apply to dispositions of our common shares or our preferred shares.

If the U.S. Internal Revenue Service or U.S. Treasury Department were to make Section 1248 and the Form 5471 filing requirement applicable to the sale of our shares, we would notify shareholders that Section 1248 of the Code and the requirement to file Form 5471 will apply to dispositions of our shares. Thereafter, we would send a notice after the end of each calendar year to all persons who were shareholders during the year notifying them that Section 1248 and the requirement to file Form 5471 apply to dispositions of our shares by U.S. Holders. We would attach to this notice a copy of Form 5471 completed with all our information and instructions for completing the shareholder information.

Tax-Exempt Shareholders

Tax-exempt entities may be required to treat certain Subpart F insurance income, including RPII, that is includible in income by the tax-exempt entity as unrelated business taxable income. Prospective investors that are tax exempt entities are urged to consult their tax advisors as to the potential impact of the unrelated business taxable income provisions of the Code.

Passive Foreign Investment Companies

Sections 1291 through 1298 of the Code contain special rules applicable with respect to foreign corporations that are "passive foreign investment companies" ("PFICs"). In general, a foreign corporation will be a PFIC if 75% or more of its income constitutes "passive income" or 50% or more of its assets produce passive income. If we were to be characterized as a PFIC, U.S. Holders would be subject to a penalty tax at the time of their sale of (or receipt of an "excess distribution" with respect to) their common shares or preferred shares. In general, a shareholder receives an "excess distribution" if the amount of the distribution is more than 125% of the average distribution with respect to the shares during the three preceding taxable years (or shorter period during which the taxpayer held the stock). In general, the penalty tax is equivalent to an interest charge on taxes that are deemed due during the period the shareholder owned the shares, computed by assuming that the excess distribution or gain (in the case of a sale) with respect to the shares was taxable in equal portions throughout the holder's period of ownership. The interest charge is equal to the applicable rate imposed on underpayments of U.S. federal income tax for such period. A U.S. shareholder may avoid some of the adverse tax consequences of owning shares in a PFIC by making a qualified electing fund ("QEF") election. A QEF election is revocable only with the consent of the IRS and has the following consequences to a shareholder:

For any year in which ACGL is not a PFIC, no income tax consequences would result.

For any year in which ACGL is a PFIC, the shareholder would include in its taxable income a proportionate share of the net ordinary income and net capital gains of ACGL and certain of its non-U.S. subsidiaries.

The PFIC statutory provisions contain an express exception for income "derived in the active conduct of an insurance business by a corporation which is predominantly engaged in an insurance

Table of Contents

business " This exception is intended to ensure that income derived by a bona fide insurance company is not treated as passive income, except to the extent such income is attributable to financial reserves in excess of the reasonable needs of the insurance business. The PFIC statutory provisions contain a look-through rule that states that, for purposes of determining whether a foreign corporation is a PFIC, such foreign corporation shall be treated as if it "received directly its proportionate share of the income" and as if it "held its proportionate share of the assets" of any other corporation in which it owns at least 25% of the stock. We believe that we are not a PFIC, and we will use reasonable best efforts to cause us and each of our non-U.S. insurance subsidiaries not to constitute a PFIC.

No regulations interpreting the substantive PFIC provisions have yet been issued. Each U.S. Holder should consult his tax advisor as to the effects of these rules.

United States Taxation of Non-U.S. Shareholders

Taxation of Dividends

Cash distributions, if any, made with respect to common shares or preferred shares held by shareholders who are not United States Persons ("Non-U.S. holders") generally will not be subject to United States withholding tax.

Sale, Exchange or Other Disposition

Non-U.S. holders of common shares or preferred shares generally will not be subject to U.S. federal income tax with respect to gain realized upon the sale, exchange or other disposition of such shares unless such gain is effectively connected with a U.S. trade or business of the Non-U.S. holder in the United States or such person is present in the United States for 183 days or more in the taxable year the gain is realized and certain other requirements are satisfied.

Information Reporting and Backup Withholding

Non-U.S. holders of common shares or preferred shares will not be subject to U.S. information reporting or backup withholding with respect to dispositions of common shares effected through a non-U.S. office of a broker, unless the broker has certain connections to the United States or is a United States person. No U.S. backup withholding will apply to payments of dividends, if any, on our common shares or our preferred shares.

Other Tax Laws

Shareholders should consult their own tax advisors with respect to the applicability to them of the tax laws of other jurisdictions.

ITEM 1A. RISK FACTORS

Set forth below are risk factors relating to our business. You should also refer to the other information provided in this report, including our "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our accompanying consolidated financial statements, as well as the information under the heading "Cautionary Note Regarding Forward-Looking Statements."

Table of Contents

Risks Relating to Our Industry

We operate in a highly competitive environment, and we may not be able to compete successfully in our industry.

The insurance and reinsurance industry is highly competitive. We compete with major U.S. and non-U.S. insurers and reinsurers, many of which have greater financial, marketing and management resources than we do, as well as other potential providers of capital willing to assume insurance and/or reinsurance risk. We also compete with new companies that continue to be formed to enter the insurance and reinsurance markets. In our insurance business, we compete with insurers that provide specialty property and casualty lines of insurance, including ACE Limited, Allied World Assurance Company, Ltd., Chartis Inc., AXIS Capital Holdings Limited, Berkshire Hathaway, Inc., Chubb Corporation, Endurance Specialty Holdings Ltd., Fairfax Financial Holdings Ltd, The Hartford Financial Services Group, Inc., HCC Insurance Holdings, Inc., Lloyd's, The Travelers Companies, Validus Holdings Ltd, W.R. Berkley Corp., XL Capital Ltd. and Zurich Insurance Group. In our reinsurance business, we compete with reinsurers that provide property and casualty lines of reinsurance, including ACE Limited, Argo International Holdings, Ltd., AXIS Capital Holdings Limited, Berkshire Hathaway, Inc., Endurance Specialty Holdings Ltd., Everest Re Group Ltd., Fairfax Financial Holdings Ltd, Hannover Rückversicherung AG, Lloyd's, Harbor Point Limited, Montpelier Re Holdings Ltd., Munich Re Group, PartnerRe Ltd., Platinum Underwriters Holdings, Ltd., RenaissanceRe Holdings Ltd., Swiss Reinsurance Company, Transatlantic Holdings, Inc., Validus Holdings Ltd and XL Capital Ltd. We do not believe that we have a significant market share in any of our markets.

Financial institutions and other capital markets participants also offer alternative products and services similar to our own or alternative products that compete with insurance and reinsurance products. In addition, we may not be aware of other companies that may be planning to enter the segments of the insurance and reinsurance market in which we operate.

Our competitive position is based on many factors, including our perceived overall financial strength, ratings assigned by independent rating agencies, geographic scope of business, client and broker relationships, premiums charged, contract terms and conditions, products and services offered (including the ability to design customized programs), speed of claims payment, reputation, experience and qualifications of employees and local presence. We may not be successful in competing with others on any of these bases, and the intensity of competition in our industry may erode profitability and result in less favorable policy terms and conditions for insurance and reinsurance companies generally, including us.

The insurance and reinsurance industry is highly cyclical, and we expect to continue to experience periods characterized by excess underwriting capacity and unfavorable premium rates.

Historically, insurers and reinsurers have experienced significant fluctuations in operating results due to competition, frequency of occurrence or severity of catastrophic events, levels of capacity, general economic conditions, changes in equity, debt and other investment markets, changes in legislation, case law and prevailing concepts of liability and other factors. In particular, demand for reinsurance is influenced significantly by the underwriting results of primary insurers and prevailing general economic conditions. The supply of insurance and reinsurance is related to prevailing prices and levels of surplus capacity that, in turn, may fluctuate in response to changes in rates of return being realized in the insurance and reinsurance industry on both underwriting and investment sides. As a result, the insurance and reinsurance business historically has been a cyclical industry characterized by periods of intense price competition due to excessive underwriting capacity as well as periods when shortages of capacity permitted favorable premium levels and changes in terms and conditions. The supply of insurance and reinsurance has increased over the past several years and may increase further,

Table of Contents

either as a result of capital provided by new entrants or by the commitment of additional capital by existing insurers or reinsurers. Continued increases in the supply of insurance and reinsurance may have consequences for us, including fewer contracts written, lower premium rates, increased expenses for customer acquisition and retention, and less favorable policy terms and conditions.

We could face unanticipated losses from war, terrorism and political instability, and these or other unanticipated losses could have a material adverse effect on our financial condition and results of operations.

We have substantial exposure to unexpected, large losses resulting from future man-made catastrophic events, such as acts of war, acts of terrorism and political instability. These risks are inherently unpredictable. It is difficult to predict the timing of such events with statistical certainty or estimate the amount of loss any given occurrence will generate. In certain instances, we specifically insure and reinsure risks resulting from acts of terrorism. Even in cases where we attempt to exclude losses from terrorism and certain other similar risks from some coverages written by us, we may not be successful in doing so. Moreover, irrespective of the clarity and inclusiveness of policy language, there can be no assurance that a court or arbitration panel will not limit enforceability of policy language or otherwise issue a ruling adverse to us. Accordingly, while we believe our reinsurance programs, together with the coverage provided under TRIPRA, are sufficient to reasonably limit our net losses relating to potential future terrorist attacks, we can offer no assurance that our available capital will be adequate to cover losses when they materialize. To the extent that an act of terrorism is certified by the Secretary of the Treasury, our U.S. insurance operations may be covered under TRIPRA for up to 85% of its losses for 2009 and future years, in each case subject to a mandatory deductible of 20% for 2009 through 2014. If an act (or acts) of terrorism result in covered losses exceeding the \$100 billion annual limit, insurers with losses exceeding their deductibles will not be responsible for additional losses. It is not possible to completely eliminate our exposure to unforecasted or unpredictable events, and to the extent that losses from such risks occur, our financial condition and results of operations could be materially adversely affected.

The insurance and reinsurance industry is subject to regulatory and legislative initiatives or proposals from time to time which could adversely affect our business.

From time to time, various regulatory and legislative changes have been proposed in the insurance and reinsurance industry. Among the proposals that have in the past been or are at present being considered are the possible introduction of federal regulation in addition to, or in lieu of, the current system of state regulation of insurers.

The extreme turmoil in the financial markets has increased the likelihood of changes in the way the financial services industry is regulated. Governmental authorities in the U.S. and worldwide have become increasingly interested in potential risks posed by the insurance industry as a whole, and to commercial and financial systems in general. While we cannot predict the exact nature, timing or scope of possible governmental initiatives, there may be increased regulatory intervention in our industry in the future. For example, the U.S. federal government has increased its scrutiny of the insurance regulatory framework in recent years, and some state legislators have considered or enacted laws that will alter and likely increase state regulation of insurance and reinsurance companies and holding companies. Moreover, the NAIC, which is an association of the insurance commissioners of all 50 states and the District of Columbia and state regulators, regularly reexamine existing laws and regulations. There are also a variety of proposals being considered by various state legislatures. In addition, Solvency II, the new EU regulatory regime which was enacted in November 2009, imposes new solvency and governance requirements across all EU Member States and is expected to be implemented in October 2012. Regulators in Bermuda and other jurisdictions in which we operate are also considering various proposals for financial and regulatory reform. The future impact of such

Table of Contents

initiatives, if any, on our results of operations or our financial condition cannot be determined at this time. We are unable to predict whether any of these laws and regulations will be adopted, the form in which any such laws and regulations would be adopted, or the effect, if any, these developments would have on our operations and financial condition.

Claims for catastrophic events could cause large losses and substantial volatility in our results of operations, and, as a result, the value of our securities, including our common shares and preferred shares, may fluctuate widely, and could have a material adverse effect on our financial position and results of operations.

We have large aggregate exposures to natural and man-made catastrophic events. Catastrophes can be caused by various events, including hurricanes, floods, windstorms, earthquakes, hailstorms, tornados, explosions, severe winter weather, fires, droughts and other natural disasters. Catastrophes can also cause losses in non-property business such as workers' compensation or general liability. In addition to the nature of the property business, we believe that economic and geographic trends affecting insured property, including inflation, property value appreciation and geographic concentration tend to generally increase the size of losses from catastrophic events over time. Our actual losses from catastrophic events which may occur may vary materially from our current estimates due to the inherent uncertainties in making such determinations resulting from several factors, including the potential inaccuracies and inadequacies in the data provided by clients, brokers and ceding companies, the modeling techniques and the application of such techniques, the contingent nature of business interruption exposures, the effects of any resultant demand surge on claims activity and attendant coverage issues.

The weather-related catastrophic events that occurred in the second half of 2005 caused significant industry losses and led to a strengthening of rating agency capital requirements for catastrophe-exposed business. The 2005 events also resulted in substantial improvements in market conditions in property and certain marine lines of business and slowed declines in premium rates in other lines. During 2006 and 2007, excellent industry results led to a significant increase in capacity, competition intensified and, in general, prices declined in all lines of business. During 2008 and 2009, we increased our writings in property and certain marine lines of business in order to take advantage of market conditions and these lines represented a larger proportion of our overall book of business than in prior periods.

In addition, over the past several years, changing weather patterns and climatic conditions, such as global warming, have added to the unpredictability and frequency of natural disasters in certain parts of the world and created additional uncertainty as to future trends and exposures. Although the loss experience of catastrophe insurers and reinsurers has historically been characterized as low frequency, there is a growing consensus today that climate change increases the frequency and severity of extreme weather events and, in recent years, the frequency of major catastrophes appears to have increased. Claims for catastrophic events could expose us to large losses and cause substantial volatility in our results of operations, which could cause the value of our securities, including our common shares and preferred shares, to fluctuate widely.

Underwriting claims and reserving for losses are based on probabilities and related modeling, which are subject to inherent uncertainties.

Our success is dependent upon our ability to assess accurately the risks associated with the businesses that we insure and reinsure. We establish reserves for losses and loss adjustment expenses which represent estimates involving actuarial and statistical projections, at a given point in time, of our expectations of the ultimate settlement and administration costs of losses incurred. We utilize actuarial models as well as available historical insurance industry loss ratio experience and loss development patterns to assist in the establishment of loss reserves. Actual losses and loss adjustment expenses paid will deviate, perhaps substantially, from the reserve estimates reflected in our financial statements.

Table of Contents

If our loss reserves are determined to be inadequate, we will be required to increase loss reserves at the time of such determination with a corresponding reduction in our net income in the period in which the deficiency becomes known. It is possible that claims in respect of events that have occurred could exceed our claim reserves and have a material adverse effect on our results of operations, in a particular period, or our financial condition in general. As a compounding factor, although most insurance contracts have policy limits, the nature of property and casualty insurance and reinsurance is such that losses can exceed policy limits for a variety of reasons and could significantly exceed the premiums received on the underlying policies, thereby further adversely affecting our financial condition.

As of December 31, 2009, our reserves for unpaid losses and loss adjustment expenses, net of unpaid losses and loss adjustment expenses recoverable, were approximately \$6.21 billion. Such reserves were established in accordance with applicable insurance laws and GAAP. Loss reserves are inherently subject to uncertainty. In establishing the reserves for losses and loss adjustment expenses, we have made various assumptions relating to the pricing of our reinsurance contracts and insurance policies and have also considered available historical industry experience and current industry conditions. Any estimates and assumptions made as part of the reserving process could prove to be inaccurate due to several factors, including the fact that relatively limited historical information has been reported to us through December 31, 2009.

The failure of any of the loss limitation methods we employ could have a material adverse effect on our financial condition or results of operations.

We have large aggregate exposures to natural and man-made catastrophic events. Catastrophes can be caused by various events, including hurricanes, floods, windstorms, earthquakes, hailstorms, tornados, explosions, severe winter weather, fires, droughts and other natural disasters. Catastrophes can also cause losses in non-property business such as workers' compensation or general liability. In addition to the nature of property business, we believe that economic and geographic trends affecting insured property, including inflation, property value appreciation and geographic concentration, tend to generally increase the size of losses from catastrophic events over time.

We have substantial exposure to unexpected, large losses resulting from future man-made catastrophic events, such as acts of war, acts of terrorism and political instability. These risks are inherently unpredictable. It is difficult to predict the timing of such events with statistical certainty or estimate the amount of loss any given occurrence will generate. It is not possible to completely eliminate our exposure to unforecasted or unpredictable events and, to the extent that losses from such risks occur, our financial condition and results of operations could be materially adversely affected. Therefore, claims for natural and man-made catastrophic events could expose us to large losses and cause substantial volatility in our results of operations, which could cause the value of our common shares to fluctuate widely. In certain instances, we specifically insure and reinsure risks resulting from terrorism. Even in cases where we attempt to exclude losses from terrorism and certain other similar risks from some coverages written by us, we may not be successful in doing so. Moreover, irrespective of the clarity and inclusiveness of policy language, there can be no assurance that a court or arbitration panel will limit enforceability of policy language or otherwise issue a ruling adverse to us.

We seek to limit our loss exposure by writing a number of our reinsurance contracts on an excess of loss basis, adhering to maximum limitations on reinsurance written in defined geographical zones, limiting program size for each client and prudent underwriting of each program written. In the case of proportional treaties, we may seek per occurrence limitations or loss ratio caps to limit the impact of losses from any one or series of events. In our insurance operations, we seek to limit our exposure through the purchase of reinsurance. We cannot be certain that any of these loss limitation methods will be effective. We also seek to limit our loss exposure by geographic diversification. Geographic zone limitations involve significant underwriting judgments, including the determination of the area of the

Table of Contents

zones and the inclusion of a particular policy within a particular zone's limits. There can be no assurance that various provisions of our policies, such as limitations or exclusions from coverage or choice of forum, will be enforceable in the manner we intend. Disputes relating to coverage and choice of legal forum may also arise. Underwriting is inherently a matter of judgment, involving important assumptions about matters that are inherently unpredictable and beyond our control, and for which historical experience and probability analysis may not provide sufficient guidance. One or more catastrophic or other events could result in claims that substantially exceed our expectations, which could have a material adverse effect on our financial condition or our results of operations, possibly to the extent of eliminating our shareholders' equity.

For our natural catastrophe exposed business, we seek to limit the amount of exposure we will assume from any one insured or reinsured and the amount of the exposure to catastrophe losses from a single event in any geographic zone. We monitor our exposure to catastrophic events, including earthquake and wind, and periodically reevaluate the estimated probable maximum pre-tax loss for such exposures. Our estimated probable maximum pre-tax loss is determined through the use of modeling techniques, but such estimate does not represent our total potential loss for such exposures. Our models employ both proprietary and vendor-based systems and include cross-line correlations for property, marine, offshore energy, aviation, workers compensation and personal accident. We seek to limit the probable maximum pre-tax loss to a specific level for severe catastrophic events. Currently, we seek to limit our 1-in-250 year return period net probable maximum loss from a severe catastrophic event in any geographic zone to approximately 25% of total shareholders' equity. We reserve the right to change this threshold at any time. Net probable maximum loss estimates are net of expected reinsurance recoveries, before income tax and before excess reinsurance reinstatement premiums. Loss estimates are reflective of the zone indicated and not the entire portfolio. Since hurricanes and windstorms can affect more than one zone and make multiple landfalls, our loss estimates include clash estimates from other zones. Our loss estimates do not represent our maximum exposures and it is highly likely that our actual incurred losses would vary materially from the modeled estimates. There can be no assurances that we will not suffer pre-tax losses greater than 25% of our total shareholders' equity from one or more catastrophic events due to several factors, including the inherent uncertainties in estimating the frequency and severity of such events and the margin of error in making such determinations resulting from potential inaccuracies and inadequacies in the data provided by clients and brokers, the modeling techniques and the application of such techniques or as a result of a decision to change the percentage of shareholders' equity exposed to a single catastrophic event. Catastrophe modeling is a relatively new discipline that utilizes a mix of historical data, scientific theory and mathematical methods. We believe that there is considerable uncertainty in the data and parameter inputs for insurance industry catastrophe models. In that regard, there is no universal standard in the preparation of insured data for use in the models and the running of modeling software. In our view, the accuracy of the models depends heavily on the availability of detailed insured loss data from actual recent large catastrophes. Due to the limited number of events, there is significant potential for substantial differences between the modeled loss estimate and actual company experience for a single large catastrophic event. This potential difference could be even greater for perils with less modeled annual frequency, such as U.S. earthquake, or less modeled annual severity, such as European windstorm. We are also reliant upon third-party estimates of industry insured exposures and there is significant variation possible around the relationship between our loss and that of the industry following a catastrophic event. In addition, actual losses may increase if our reinsurers fail to meet their obligations to us or the reinsurance protections purchased by us are exhausted or are otherwise unavailable. See "Risk Factors Risk Relating to Our Industry" and "Management's Discussion and Analysis of Financial Condition and Results of Operations Natural and Man-Made Catastrophic Events." Depending on business opportunities and the mix of business that may comprise our insurance and reinsurance portfolio, we may seek to adjust our self-imposed limitations on probable maximum pre-tax loss for catastrophe exposed business.

Table of Contents

The risk associated with reinsurance underwriting could adversely affect us, and while reinsurance and retrocessional coverage will be used to limit our exposure to risks, the availability of such arrangements may be limited, and counterparty credit and other risks associated with our reinsurance arrangements may result in losses which could adversely affect our financial condition and results of operations.

Like other reinsurers, our reinsurance group does not separately evaluate each of the individual risks assumed under reinsurance treaties. Therefore, we are largely dependent on the original underwriting decisions made by ceding companies. We are subject to the risk that the ceding companies may not have adequately evaluated the risks to be reinsured and that the premiums ceded may not adequately compensate us for the risks we assume.

For the purposes of managing risk, we use reinsurance and also may use retrocessional arrangements. In the normal course of business, our insurance subsidiaries cede a portion of their premiums through pro rata, excess of loss and facultative reinsurance agreements. Our reinsurance subsidiaries purchase a limited amount of retrocessional coverage as part of their aggregate risk management program. In addition, our reinsurance subsidiaries participate in "common account" retrocessional arrangements for certain pro rata treaties. Such arrangements reduce the effect of individual or aggregate losses to all companies participating on such treaties, including the reinsurers, such as our reinsurance subsidiaries, and the ceding company. For 2009, ceded premiums written represented approximately 23.1% of gross premiums written, compared to 23.5% and 29.9%, respectively, for 2008 and 2007.

The availability and cost of reinsurance and retrocessional protection is subject to market conditions, which are beyond our control. As a result of such market conditions and other factors, we may not be able to successfully mitigate risk through reinsurance and retrocessional arrangements. Further, we are subject to credit risk with respect to our reinsurance and retrocessions because the ceding of risk to reinsurers and retrocessionaires does not relieve us of our liability to the clients or companies we insure or reinsure. Our losses for a given event or occurrence may increase if our reinsurers or retrocessionaires dispute or fail to meet their obligations to us or the reinsurance or retrocessional protections purchased by us are exhausted or are otherwise unavailable for any reason. Our failure to establish adequate reinsurance or retrocessional arrangements or the failure of our existing reinsurance or retrocessional arrangements to protect us from overly concentrated risk exposure could adversely affect our financial condition and results of operations. We monitor the financial condition of our reinsurers and attempt to place coverages only with carriers we view as substantial and financially sound. At December 31, 2009 and 2008, approximately 90.0% and 88.5%, respectively, of our reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.72 billion and \$1.79 billion, respectively, were due from carriers which had an A.M. Best rating of "A-" or better. At December 31, 2009 and 2008, the largest reinsurance recoverables from any one carrier were less than 5.8% and 7.3%, respectively, of our total shareholders' equity. In connection with our acquisition of Arch Specialty in February 2002, the seller, Sentry, agreed to reinsure and guarantee all liabilities arising out of Arch Specialty's business prior to the closing of the acquisition. In addition to the guarantee provided by Sentry, substantially all of the \$19.1 million recoverable from Sentry is still subject to the original reinsurance agreements inuring to Arch Specialty and, to the extent Sentry fails to comply with its payment obligations to us, we may obtain reimbursement from the third party reinsurers under such agreements.

Our reliance on brokers subjects us to their credit risk.

In accordance with industry practice, we generally pay amounts owed on claims under our insurance and reinsurance contracts to brokers, and these brokers, in turn, pay these amounts to the clients that have purchased insurance or reinsurance from us. In some jurisdictions, if a broker fails to make such payment, we may remain liable to the insured or ceding insurer for the deficiency. Likewise, in certain jurisdictions, when the insured or ceding company pays the premiums for these contracts to

Table of Contents

brokers for payment to us, these premiums are considered to have been paid and the insured or ceding company will no longer be liable to us for those amounts, whether or not we have actually received the premiums from the broker. Consequently, we assume a degree of credit risk associated with our brokers. To date, we have not experienced any losses related to this credit risk.

We cannot predict the effect that the investigation currently being conducted by the New York Attorney General and others will have on the industry or our business, and the effects of emerging claims and coverage issues and certain proposed legislation are uncertain.

The New York Attorney General, various state insurance regulatory authorities and others continue to prosecute actions arising out of contingent commission payments to brokers (and the disclosures relating to such payments), "bid-rigging," "steering," and other practices in the insurance industry. A number of brokers recently announced that they have reached agreement with the New York Attorney General and other state insurance regulatory authorities which would allow them to collect contingent commissions once again. However, we cannot predict the effect that this agreement or these prosecutions, any related investigations and/or resulting changes in insurance practices (including future legislation and/or regulations that may become applicable to our business) will have on the insurance industry, the regulatory framework or our business.

The effects of emerging claims and coverage issues are uncertain. The insurance industry is also affected by political, judicial and legal developments which have in the past resulted in new or expanded theories of liability. These or other changes could impose new financial obligations on us by extending coverage beyond our underwriting intent or otherwise require us to make unplanned modifications to the products and services that we provide, or cause the delay or cancellation of products and services that we provide. In some instances, these changes may not become apparent until some time after we have issued insurance or reinsurance contracts that are affected by the changes. As a result, the full extent of liability under our insurance or reinsurance contracts may not be known for many years after a contract is issued. The effects of unforeseen developments or substantial government intervention could adversely impact our ability to achieve our goals.

Risks Relating to Our Company

Our success will depend on our ability to maintain and enhance effective operating procedures and internal controls.

We continue to enhance our operating procedures and internal controls (including the timely and successful implementation of our information technology initiatives, which include the implementation of improved computerized systems and programs to replace and support manual systems, and including controls over financial reporting) to effectively support our business and our regulatory and reporting requirements. Our management does not expect that our disclosure controls or our internal controls will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. As a result of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons or by collusion of two or more people. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. As a result of the inherent limitations in a cost-effective

Table of Contents

control system, misstatement due to error or fraud may occur and not be detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the disclosure controls and procedures are met.

A downgrade in our ratings or our inability to obtain a rating for our operating insurance and reinsurance subsidiaries may adversely affect our relationships with clients and brokers and negatively impact sales of our products.

Our operating insurance and reinsurance subsidiaries are rated by ratings agencies. Brokers negotiate contracts of insurance between insured and insurer on behalf of the insured and intermediaries negotiate contracts of reinsurance between a primary insurer and reinsurer, on behalf of the primary insurer. Third-party rating agencies, such as A.M. Best, assess and rate the financial strength of insurers and reinsurers based upon criteria established by the rating agencies, which criteria are subject to change. Ratings are an important factor in establishing the competitive position of insurance and reinsurance companies. Insureds, insurers, ceding insurers and intermediaries use these ratings as one measure by which to assess the financial strength and quality of insurers and reinsurers. These ratings are often an important factor in the decision by an insured, ceding insurer, broker or intermediary of whether to place business with a particular insurance or reinsurance provider. Our financial strength ratings are subject to periodic review as rating agencies evaluate us to confirm that we continue to meet their criteria for ratings assigned to us by them. Such ratings may be revised downward or revoked at the sole discretion of such ratings agencies in response to a variety of factors, including a minimum capital adequacy ratio, management, earnings, capitalization and risk profile. We can offer no assurances that our ratings will remain at their current levels. A ratings downgrade or the potential for such a downgrade, or failure to obtain a necessary rating, could adversely affect both our relationships with agents, brokers, wholesalers, intermediaries and other distributors of our existing products and services and new sales of our products and services. In addition, under certain of the reinsurance agreements assumed by our reinsurance operations, upon the occurrence of a ratings downgrade or other specified triggering event with respect to our reinsurance operations, such as a reduction in surplus by specified amounts during specified periods, our ceding company clients may be provided with certain rights, including, among other things, the right to terminate the subject reinsurance agreement and/or to require that our reinsurance operations post additional collateral. Any ratings downgrade or failure to obtain a necessary rating could adversely affect our ability to compete in our markets, could cause our premiums and earnings to decrease and have a material adverse impact on our financial condition and results of operations. In addition, a downgrade in ratings of certain of our operating subsidiaries would in certain cases constitute an event of default under our credit facilities. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Contractual Obligations and Commercial Commitments Letter of Credit and Revolving Credit Facilities" for a discussion of our credit facilities.

In light of the difficulties experienced recently by many financial institutions, including our competitors in the insurance industry, we believe it is possible that rating agencies may heighten the level of scrutiny they apply when analyzing companies in our industry, may increase the frequency and scope of their reviews, may request additional information from the companies that they rate (including additional information regarding the valuation of investment securities held), and may adjust upward the capital and other requirements employed in their models for maintenance of certain rating levels.

The loss of our key employees or our inability to retain them could negatively impact our business.

Our success has been, and will continue to be, dependent on our ability to retain the services of our existing key executive officers and to attract and retain additional qualified personnel in the future. The pool of talent from which we actively recruit is limited. Although, to date, we have not experienced difficulties in attracting and retaining key personnel, the inability to attract and retain qualified

Table of Contents

personnel when available and the loss of services of key personnel could have a material adverse effect on our financial condition and results of operations. In addition, our underwriting staff is critical to our success in the production of business. While we do not consider any of our key executive officers or underwriters to be irreplaceable, the loss of the services of our key executive officers or underwriters or the inability to hire and retain other highly qualified personnel in the future could delay or prevent us from fully implementing our business strategy which could affect our financial performance. We are not aware of any intentions of any of our key personnel that would cause them no longer to provide their professional services to us in the near future.

The preparation of our financial statements requires us to make many estimates and judgments, which are even more difficult than those made in a mature company since relatively limited historical information has been reported to us through December 31, 2009.

The preparation of consolidated financial statements requires us to make many estimates and judgments that affect the reported amounts of assets, liabilities (including reserves), revenues and expenses, and related disclosures of contingent liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, insurance and other reserves, reinsurance recoverables, investment valuations, intangible assets, bad debts, income taxes, contingencies and litigation. We base our estimates on historical experience, where possible, and on various other assumptions that we believe to be reasonable under the circumstances, which form the basis for our judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Estimates and judgments for a relatively new insurance and reinsurance company, like our company, are even more difficult to make than those made in a mature company since relatively limited historical information has been reported to us through December 31, 2009. Instead, our current loss reserves are primarily based on estimates involving actuarial and statistical projections of our expectations of the ultimate settlement and administration costs of claims incurred but not yet reported. We utilize actuarial models as well as historical insurance industry loss development patterns to establish our initial loss reserves. Over time, other common reserving methodologies have begun to be employed. Actual claims and claim expenses paid may deviate, perhaps substantially, from the reserve estimates reflected in our financial statements.

The price of our common shares may be volatile.

There has been significant volatility in the market for equity securities. During 2009 and 2008, the price of our common shares fluctuated from a low of \$44.68 to a high of \$72.25 and from a low of \$54.80 to a high of \$80.47, respectively. On February 23, 2010, our common shares closed at a price of \$72.67. The price of our common shares may not remain at or exceed current levels. The following factors, in addition to those described in other risk factors above, may have an adverse impact on the market price of our common stock:

actual or anticipated variations in our quarterly results of operations, including as a result of catastrophes or our investment performance;

our share repurchase program;

changes in market valuation of companies in the insurance and reinsurance industry;

changes in expectations of future financial performance or changes in estimates of securities analysts;

fluctuations in stock market process and volumes;

issuances or sales of common shares or other securities in the future;

the addition or departure of key personnel; and

Table of Contents

announcements by us or our competitors of acquisitions, investments or strategic alliances.

Stock markets in the United States are experiencing particularly volatile price and volume fluctuations. Such fluctuations, as well as general political conditions, the current poor economic conditions and recession or interest rate or currency rate fluctuations, could adversely affect the market price of our stock.

Adverse developments in the financial markets could have a material adverse effect on our results of operations, financial position and our businesses, and may also limit our access to capital; our policyholders, reinsurers and retrocessionaires may also be affected by such developments, which could adversely affect their ability to meet their obligations to us.

Adverse developments in the financial markets, such as disruptions, uncertainty or volatility in the capital and credit markets, may result in realized and unrealized capital losses that could have a material adverse effect on our results of operations, financial position and our businesses, and may also limit our access to capital required to operate our business. Such developments include severe disruptions in the public debt and equity markets, including among other things, widening of credit spreads, lack of liquidity and bankruptcies. Depending on market conditions, we could incur additional realized and unrealized losses on our investment portfolio in future periods, which could have a material adverse effect on our results of operations, financial condition and business. Current economic conditions could also have a material impact on the frequency and severity of claims and therefore could negatively impact our underwriting returns. In addition, our policyholders, reinsurers and retrocessionaires may be affected by such developments in the financial markets, which could adversely affect their ability to meet their obligations to us. The volatility in the financial markets could continue to significantly affect our investment returns, reported results and shareholders' equity.

Our business is dependent upon insurance and reinsurance brokers and intermediaries, and the loss of important broker relationships could materially adversely affect our ability to market our products and services.

We market our insurance and reinsurance products primarily through brokers and intermediaries. We derive a significant portion of our business from a limited number of brokers. During 2009, approximately 15.6% and 21.4% of our gross premiums written were generated from or placed by Marsh & McLennan Companies and its subsidiaries and AON Corporation and its subsidiaries, respectively. No other broker and no one insured or reinsured accounted for more than 10% of gross premiums written for 2009. Some of our competitors have had longer term relationships with the brokers we use than we have, and the brokers may promote products offered by companies that may offer a larger variety of products than we do. Loss of all or a substantial portion of the business provided by these brokers could have a material adverse effect on us.

We could be materially adversely affected to the extent that managing general agents, general agents and other producers in our program business exceed their underwriting authorities or otherwise breach obligations owed to us.

In program business conducted by our insurance group, following our underwriting, financial, claims and information technology due diligence reviews, we authorize managing general agents, general agents and other producers to write business on our behalf within underwriting authorities prescribed by us. Once a program incept, we must rely on the underwriting controls of these agents to write business within the underwriting authorities provided by us. Although we monitor our programs on an ongoing basis, our monitoring efforts may not be adequate or our agents may exceed their underwriting authorities or otherwise breach obligations owed to us. We have experienced breaches by certain of our agents, all of which have been resolved favorably for us. To the extent that our agents

Table of Contents

exceed their authorities or otherwise breach obligations owed to us in the future, our financial condition and results of operations could be materially adversely affected.

Our investment performance may affect our financial results and ability to conduct business.

Our operating results depend in part on the performance of our investment portfolio. A significant portion of our cash and invested assets consists of fixed maturities (84.8% as of December 31, 2009). Although our current investment guidelines and approach stress preservation of capital, market liquidity and diversification of risk, our investments are subject to market-wide risks and fluctuations. In addition, we are subject to risks inherent in particular securities or types of securities, as well as sector concentrations. We may not be able to realize our investment objectives, which could reduce our net income significantly. In the event that we are unsuccessful in correlating our investment portfolio with our expected insurance and reinsurance liabilities, we may be forced to liquidate our investments at times and prices that are not optimal, which could have a material adverse effect on our financial results and ability to conduct our business.

We may be adversely affected by changes in economic conditions, including interest rate changes, as well as legislative changes.

Our operating results are affected, in part, by the performance of our investment portfolio. Our investment portfolio contains fixed and floating rate securities and instruments, such as bonds, which may be adversely affected by changes in interest rates. Changes in interest rates could also have an adverse effect on our investment income and results of operations. For example, if interest rates increase, the value of our investment portfolio may decline. Although lower interest rates may increase the value of our portfolio, our investment income might suffer from the lower rates at which new cash could be deployed.

In addition, our investment portfolio includes residential mortgage-backed securities ("MBS"). As of December 31, 2009, MBS constituted approximately 12.8% of our cash and invested assets. As with other fixed income investments, the market value of these securities fluctuates depending on market and other general economic conditions and the interest rate environment. Changes in interest rates can expose us to changes in the prepayment rate on these investments. In periods of declining interest rates, mortgage prepayments generally increase and MBS are prepaid more quickly, requiring us to reinvest the proceeds at the then current market rates. Conversely, in periods of rising rates, mortgage prepayments generally fall, preventing us from taking full advantage of the higher level of rates. However, current economic conditions may curtail prepayment activity as refinancing becomes more difficult, thus limiting prepayments on MBS.

Interest rates are highly sensitive to many factors, including the fiscal and monetary policies of the U.S. and other major economies, inflation, economic and political conditions and other factors beyond our control. Although we attempt to take measures to manage the risks of investing in changing interest rate environments, we may not be able to mitigate interest rate sensitivity effectively. Despite our mitigation efforts, an increase in interest rates could have a material adverse effect on our book value.

Since 2007, the residential mortgage market in the U.S. has experienced a variety of difficulties. During this time, delinquencies and losses with respect to residential mortgage loans generally have increased and may continue to increase, particularly in the subprime sector. In addition, during this period, residential property values in many states have declined or remained stable, after extended periods during which those values appreciated. A continued decline or an extended flattening in those values may result in additional increases in delinquencies and losses on residential mortgage loans generally, especially with respect to second homes and investment properties, and with respect to any residential mortgage loans where the aggregate loan amounts (including any subordinate loans) are

Table of Contents

close to or greater than the related property values. These developments may have a significant adverse effect on the prices of loans and securities, including those in our investment portfolio. The situation continues to have wide ranging consequences, including downward pressure on economic growth and the potential for increased insurance and reinsurance exposures, which could have an adverse impact on our results of operations, financial condition, business and operations. Our portfolio includes commercial mortgage backed securities ("CMBS"). At December 31, 2009, CMBS constituted approximately 10.4% of our cash and invested assets. The commercial real estate market has recently experienced price deterioration, which could lead to increased delinquencies and defaults on commercial real estate mortgages.

The U.S. Congress has considered in the past, and may consider in the future, federal legislation which would provide legislative relief for homeowners, including an amendment of bankruptcy laws to permit the modification of mortgage loans in bankruptcy proceedings. These loan modification programs, as well as future legislative or regulatory actions, including amendments to the bankruptcy laws, that result in the modification of outstanding mortgage loans, may adversely affect the value of, and the returns on, certain mortgage-backed securities we own.

Certain of our investments are illiquid and are difficult to sell, or to sell in significant amounts at acceptable prices, to generate cash to meet our needs.

Our investments in certain securities, including certain fixed income and structured securities, investments in funds accounted for using the equity method, other investments and our investment in Gulf Re (joint venture) may be illiquid due to contractual provisions or investment market conditions. If we require significant amounts of cash on short notice in excess of anticipated cash requirements, then we may have difficulty selling these investments in a timely manner or may be forced to sell or terminate them at unfavorable values.

The determination of the amount of allowances and impairments taken on our investments is highly subjective and could materially impact our results of operations or financial position.

The determination of the amount of allowances and impairments vary by investment type and is based upon our periodic evaluation and assessment of known and inherent risks associated with the respective asset class. Such evaluations and assessments are revised as conditions change and new information becomes available. On a quarterly basis, we evaluate whether the market value of any of our investments are other-than-temporarily impaired. Our process for reviewing invested assets for impairments during any quarter includes the following: (i) identification and evaluation of investments that have possible indications of other-than-temporary impairment, which includes an analysis of investments with gross unrealized investment losses in excess of certain criteria (including the length of time and significance of the decline); (ii) an analysis of our intent and ability to hold the investment for a sufficient period of time for the value to recover; (iii) consideration of evidential matter, including an evaluation of the potential for the loss of principal; (iv) a review of the investee's current financial condition, liquidity, near-term recovery prospects and other factors; and (v) determination of the status of each analyzed investment as other-than-temporary or not.

Where our analysis of the above factors results in the conclusion that declines in market values are other-than-temporary, the cost basis of the securities is written down to market value and the write-down is reflected as a realized loss. We recognize a realized loss when impairment is deemed to be other-than-temporary even if a decision to sell an invested asset has not been made. We may, from time to time, sell invested assets subsequent to the balance sheet date that were considered temporarily impaired at the balance sheet date. Such sales are generally due to events occurring subsequent to the balance sheet date that result in a change in our intent or ability to hold an invested asset. The types of events that may result in a sale include significant changes in the economic facts and circumstances related to the invested asset, significant unforeseen changes in our liquidity needs, or changes in tax laws or the regulatory environment.

Table of Contents

There can be no assurance that our management has accurately assessed the level of impairments taken and allowances reflected in our financial statements. Furthermore, additional impairments may need to be taken or allowances provided for in the future. Historical trends may not be indicative of future impairments or allowances.

We may require additional capital in the future, which may not be available or only available on unfavorable terms.

We monitor our capital adequacy on a regular basis. The capital requirements of our business depend on many factors, including our ability to write new business successfully and to establish premium rates and reserves at levels sufficient to cover losses. Our ability to underwrite is largely dependent upon the quality of our claims paying and financial strength ratings as evaluated by independent rating agencies. To the extent that our existing capital is insufficient to fund our future operating requirements and/or cover claim losses, we may need to raise additional funds through financings or limit our growth. Any equity or debt financing, if available at all, may be on terms that are unfavorable to us. In the case of equity financings, dilution to our shareholders could result, and, in any case, such securities may have rights, preferences and privileges that are senior to those of our outstanding securities. Disruptions, uncertainty or volatility in the capital and credit markets may also limit our access to capital required to operate our business. Such market conditions may limit our ability to access the capital necessary to develop our business and replace, in a timely manner, our letters of credit facilities upon maturity. As such, we may be forced to delay raising capital or bear an unattractive cost of capital which could decrease our profitability and significantly reduce our financial flexibility. If we are not able to obtain adequate capital, our business, results of operations and financial condition could be adversely affected. See "Management's Discussion and Analysis of Financial Condition and Results of Operations Financial Condition, Liquidity and Capital Resources Liquidity and Capital Resources."

We sold our prior reinsurance operations in May 2000 and may have liability to the purchaser and continuing liability from those reinsurance operations if the purchaser should fail to make payments on the reinsurance liabilities it assumed.

On May 5, 2000, we sold our prior reinsurance operations to WTM Re. The WTM Re transaction was structured as a transfer and assumption agreement (and not reinsurance), and, accordingly, the loss reserves (and any related reinsurance recoverables) relating to the transferred business are not included as assets or liabilities on our balance sheet. In addition, in connection with that asset sale, we made extensive representations and warranties about us and our reinsurance operations, some of which survived the closing of the asset sale. Breach of these representations and warranties could result in liability for us. In the event that WTM Re refuses or is unable to make payment for reserved losses transferred to it by us in the May 2000 sale and the notice given to reinsureds is found not to be an effective release by such reinsureds, we would be liable for such claims. A.M. Best has assigned an "A-" (Excellent) financial strength rating to WTM Re. WTM Re reported policyholders' surplus of \$708.8 million at December 31, 2008.

We sold our non-standard automobile insurance operations and merchant banking operations in 2004 and may have liability to the purchasers.

In 2004, we sold our non-standard automobile insurance operations and merchant banking operations to third party purchasers. In connection with such sales, we made representations and warranties about us and our transferred businesses, some of which survived the closing of such sales. Breach of these representations and warranties could result in liability to us.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

Any future acquisitions, growth of our operations through the addition of new lines of insurance or reinsurance business through our existing subsidiaries or through the formation of new subsidiaries, expansion into new geographic regions and/or joint ventures or partnerships may expose us to operational risks.

We may in the future make strategic acquisitions either of other companies or selected blocks of business, expand our business lines or enter into joint ventures. Any future acquisitions may expose us to operational challenges and risks, including:

integrating financial and operational reporting systems;

establishing satisfactory budgetary and other financial controls;

funding increased capital needs and overhead expenses;

obtaining management personnel required for expanded operations;

funding cash flow shortages that may occur if anticipated sales and revenues are not realized or are delayed, whether by general economic or market conditions or unforeseen internal difficulties;

the value of assets acquired may be lower than expected or may diminish due to credit defaults or changes in interest rates and liabilities assumed may be greater than expected;

the assets and liabilities we may acquire may be subject to foreign currency exchange rate fluctuation; and

financial exposures in the event that the sellers of the entities we acquire are unable or unwilling to meet their indemnification, reinsurance and other obligations to us.

Our failure to manage successfully these operational challenges and risks may impact our results of operations. In addition, if the reserves established by us, as they relate to any acquired book of business, prove to be inadequate, then subject to whatever recourse we may have against the seller or reinsurers, we may be responsible for adverse development in such reserves.

Some of the provisions of our bye-laws and our shareholders agreement may have the effect of hindering, delaying or preventing third party takeovers or changes in management initiated by shareholders. These provisions may also prevent our shareholders from receiving premium prices for their shares in an unsolicited takeover.

Some provisions of our bye-laws could have the effect of discouraging unsolicited takeover bids from third parties or changes in management initiated by shareholders. These provisions may encourage companies interested in acquiring us to negotiate in advance with our board of directors, since the board has the authority to overrule the operation of several of the limitations.

Among other things, our bye-laws provide:

for a classified board of directors, in which the directors of the class elected at each annual general meeting holds office for a term of three years, with the term of each class expiring at successive annual general meetings of shareholders;

that the number of directors is determined by the board from time to time by a vote of the majority of our board;

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

that directors may only be removed for cause, and cause removal shall be deemed to exist only if the director whose removal is proposed has been convicted of a felony or been found by a court to be liable for gross negligence or misconduct in the performance of his or her duties;

Table of Contents

that our board has the right to fill vacancies, including vacancies created by an expansion of the board; and

for limitations on shareholders' right to call special general meetings and to raise proposals or nominate directors at general meetings.

Our bye-laws provide that certain provisions which may have anti-takeover effects may be repealed or altered only with prior board approval and upon the affirmative vote of holders of shares representing at least 65% of the total voting power of our shares entitled generally to vote at an election of directors.

The bye-laws also contain a provision limiting the rights of any U.S. person (as defined in section 7701(a)(30) of the Internal Revenue Code of 1986, as amended (the "Code")) that owns shares of ACGL, directly, indirectly or constructively (within the meaning of section 958 of the Code), representing more than 9.9% of the voting power of all shares entitled to vote generally at an election of directors. The votes conferred by such shares of such U.S. person will be reduced by whatever amount is necessary so that after any such reduction the votes conferred by the shares of such person will constitute 9.9% of the total voting power of all shares entitled to vote generally at an election of directors. Notwithstanding this provision, the board may make such final adjustments to the aggregate number of votes conferred by the shares of any U.S. person that the board considers fair and reasonable in all circumstances to ensure that such votes represent 9.9% of the aggregate voting power of the votes conferred by all shares of ACGL entitled to vote generally at an election of directors. ACGL will assume that all shareholders (other than the Warburg Pincus funds) are U.S. persons unless we receive assurance satisfactory to us that they are not U.S. persons.

Moreover, most states, including states in which our subsidiaries are domiciled, have laws and regulations that require regulatory approval of a change in control of an insurer or an insurer's holding company. Where such laws apply to us and our subsidiaries, there can be no effective change in our control unless the person seeking to acquire control has filed a statement with the regulators and has obtained prior approval for the proposed change from such regulators. The usual measure for a presumptive change in control pursuant to these laws is the acquisition of 10% or more of the voting power of the insurance company or its parent, although this presumption is rebuttable. Consequently, a person may not acquire 10% or more of our common shares without the prior approval of insurance regulators in the state in which our subsidiaries are domiciled.

The bye-laws also provide that the affirmative vote of at least 66²/₃% of the outstanding voting power of our shares (excluding shares owned by any person (and such person's affiliates and associates) that is the owner of 15% or more (a "15% Holder") of our outstanding voting shares) shall be required (the "extraordinary vote") for various corporate actions, including:

merger or consolidation of the Company into a 15% Holder;

sale of any or all of our assets to a 15% Holder;

the issuance of voting securities to a 15% Holder; or

amendment of these provisions;

provided, however, the extraordinary vote will not apply to any transaction approved by the board.

The provisions described above may have the effect of making more difficult or discouraging unsolicited takeover bids from third parties. To the extent that these effects occur, shareholders could be deprived of opportunities to realize takeover premiums for their shares and the market price of their shares could be depressed. In addition, these provisions could also result in the entrenchment of incumbent management.

Table of Contents

Our operating insurance and reinsurance subsidiaries are subject to regulation in various jurisdictions, and material changes in the regulation of their operations could adversely affect our results of operations.

Our insurance and reinsurance subsidiaries are subject to government regulation in each of the jurisdictions in which they are licensed or authorized to do business. Governmental agencies have broad administrative power to regulate many aspects of the insurance business, which may include trade and claim practices, accounting methods, premium rates, marketing practices, claims practices, advertising, policy forms, and capital adequacy. These agencies are concerned primarily with the protection of policyholders rather than shareholders. Moreover, insurance laws and regulations, among other things:

establish solvency requirements, including minimum reserves and capital and surplus requirements;

limit the amount of dividends, tax distributions, intercompany loans and other payments our insurance subsidiaries can make without prior regulatory approval;

impose restrictions on the amount and type of investments we may hold;

require assessments through guaranty funds to pay claims of insolvent insurance companies; and

require participation in state-assigned risk plans which may take the form of reinsuring a portion of a pool of policies or the direct issuance of policies to insureds.

The National Association of Insurance Commissioners ("NAIC") continuously examines existing laws and regulations in the United States. We cannot predict the effect that any NAIC recommendations or proposed or future legislation or rule making in the United States or elsewhere may have on our financial condition or operations.

Our Bermuda insurance and reinsurance subsidiary, Arch Re Bermuda, conducts its business from its offices in Bermuda and is not licensed or admitted to do business in any jurisdiction except Bermuda. We do not believe that Arch Re Bermuda is subject to the insurance laws of any state in the United States; however, recent scrutiny of the insurance and reinsurance industry in the U.S. and other countries could subject Arch Re Bermuda to additional regulation. Our U.S. reinsurance subsidiary, Arch Re U.S., and our U.S. insurance subsidiaries, Arch Insurance, Arch Specialty, Arch E&S and Arch Indemnity, write reinsurance and insurance in the U.S. These subsidiaries are subject to extensive regulation under state statutes which delegate regulatory, supervisory and administrative powers to state insurance commissioners. Such regulation generally is designed to protect policyholders rather than investors. In addition, the Canadian branch of Arch Insurance writes insurance in Canada and is subject to federal, as well as provincial and territorial, regulation in Canada.

Arch Insurance Europe conducts its business from offices in London, branch offices of Arch Insurance Company Europe in, Italy, Spain, Germany and Denmark. Arch Insurance Europe is subject to the insurance regulations of the U.K. Arch Re Europe, our reinsurance subsidiary in Ireland, conducts its business from its office in Ireland and branches in Switzerland and Denmark. It is subject to the reinsurance regulations of Ireland. Arch Insurance Europe and Arch Re Europe are also subject to the EU regulations and regulations of the respective Member States where they have established branches or in which they conduct business, but with respect to the conduct of their business in such Member State, but each company remains subject only to the financial and operational supervision by the FSA, in the case of Arch Insurance Europe, and IFSRA, in the case of Arch Re Europe. Arch Insurance Europe and Arch Re Europe have the freedom to provide their respective insurance and reinsurance services anywhere in the EEA subject to compliance with certain rules governing such provision, including notification to the FSA and IFSRA, respectively. Arch Insurance Company Europe is also approved as an excess and surplus lines insurer in 17 states and the District of Columbia in the U.S.

Table of Contents

Our U.S., Bermuda, U.K. and Ireland subsidiaries and the Canadian branch of Arch Insurance are required to maintain minimum capital and surplus as mandated by their respective jurisdictions of incorporation and, in some cases, by the jurisdictions in which those subsidiaries write business. Arch Insurance Company Europe is required to maintain minimum capital surplus as mandated by the NAIC and certain states where it is approved as an excess and surplus lines insurer. All of our subsidiaries are currently in compliance with these capital and surplus requirements.

We periodically review our corporate structure so that we can optimally deploy our capital. Changes in that structure require regulatory approval. Delays or failure in obtaining any of these approvals could limit the amount of insurance that we can write in the U.S.

If ACGL or any of our subsidiaries were to become subject to the laws of a new jurisdiction in which such entity is not presently admitted, ACGL or such subsidiary may not be in compliance with the laws of the new jurisdiction. Any failure to comply with applicable laws could result in the imposition of significant restrictions on our ability to do business, and could also result in fines and other sanctions, any or all of which could adversely affect our financial condition and results of operations.

If our Bermuda operating subsidiary becomes subject to insurance statutes and regulations in jurisdictions other than Bermuda or if there is a change in Bermuda law or regulations or the application of Bermuda law or regulations, there could be a significant and negative impact on our business.

Arch Re Bermuda, our Bermuda insurance and reinsurance subsidiary, is a registered Bermuda Class 4 insurer. As such, it is subject to regulation and supervision in Bermuda. Bermuda insurance statutes and the regulations and policies of the BMA require Arch Re Bermuda to, among other things:

maintain a minimum level of capital and surplus;

maintain an enhanced capital requirement, a solvency margin and a liquidity ratio;

restrict dividends and distributions;

obtain prior approval regarding the ownership and transfer of shares;

maintain a principal office and appoint and maintain a principal representative in Bermuda;

file an annual statutory financial return and capital and solvency return; and

allow for the performance of certain period examinations of Arch Re Bermuda and its financial condition.

These statutes and regulations may restrict our ability to write insurance and reinsurance policies, distribute funds and pursue our investment strategy.

We do not presently intend for Arch Re Bermuda to be admitted to do business in the U.S., U.K. or any jurisdiction other than Bermuda. However, we cannot assure you that insurance regulators in the U.S., U.K. or elsewhere will not review the activities of Arch Re Bermuda or its subsidiaries or agents and claim that Arch Re Bermuda is subject to such jurisdiction's licensing requirements.

Generally, Bermuda insurance statutes and regulations applicable to Arch Re Bermuda are less restrictive than those that would be applicable if they were governed by the laws of any states in the U.S. If in the future we become subject to any insurance laws of the U.S. or any state thereof or of any other jurisdiction, we cannot assure you that we would be in compliance with such laws or that complying with such laws would not have a significant and negative effect on our business.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

The process of obtaining licenses is very time consuming and costly and Arch Re Bermuda may not be able to become licensed in jurisdictions other than Bermuda should we choose to do so. The

Table of Contents

modification of the conduct of our business that would result if we were required or chose to become licensed in certain jurisdictions could significantly and negatively affect our financial condition and results of operations. In addition, our inability to comply with insurance statutes and regulations could significantly and adversely affect our financial condition and results of operations by limiting our ability to conduct business as well as subject us to penalties and fines.

Because Arch Re Bermuda is a Bermuda company, it is subject to changes in Bermuda law and regulation that may have an adverse impact on our operations, including through the imposition of tax liability or increased regulatory supervision. In addition, Arch Re Bermuda will be exposed to any changes in the political environment in Bermuda, including, without limitation, changes as a result of the independence issues currently being discussed in Bermuda. The Bermuda insurance and reinsurance regulatory framework recently has become subject to increased scrutiny in many jurisdictions, including the U.K. While we cannot predict the future impact on our operations of changes in the laws and regulation to which we are or may become subject, any such changes could have a material adverse effect on our business, financial condition and results of operations.

ACGL is a holding company and is dependent on dividends and other payments from its operating subsidiaries, which are subject to dividend restrictions, to make payments, including the payment of debt service obligations and operating expenses we may incur and any payments of dividends, redemption amounts or liquidation amounts with respect to our preferred shares and common shares.

ACGL is a holding company whose assets primarily consist of the shares in our subsidiaries. Generally, ACGL depends on its available cash resources, liquid investments and dividends or other distributions from subsidiaries to make payments, including the payment of debt service obligations and operating expenses it may incur and any payments of dividends, redemption amounts or liquidation amounts with respect to our preferred shares and common shares. For 2009, 2008 and 2007, ACGL received dividends of \$530.4 million, \$527.1 million and \$602.1 million, respectively, from Arch Re Bermuda. Such amounts were used to fund the share repurchase program, pay interest on ACGL's senior notes and for other corporate expenses.

The ability of our regulated insurance and reinsurance subsidiaries to pay dividends or make distributions is dependent on their ability to meet applicable regulatory standards. Under Bermuda law, Arch Re Bermuda is required to maintain an enhanced capital requirement and a solvency margin. Arch Re Bermuda is prohibited from declaring or paying any dividends during any financial year if it is not in compliance with its enhanced capital requirement, solvency margin or minimum liquidity ratio. In addition, Arch Re Bermuda is prohibited from declaring or paying in any financial year dividends of more than 25% of its total statutory capital and surplus (as shown on its previous financial year's statutory balance sheet) unless it files, at least seven days before payment of such dividends, with the BMA an affidavit stating that it will continue to meet the required margins. In addition, Arch Re Bermuda is prohibited, without prior approval of the BMA, from reducing by 15% or more its total statutory capital, as set out in its previous year's statutory financial statements. At December 31, 2009, as determined under Bermuda law, Arch Re Bermuda had statutory capital of \$2.23 billion and statutory capital and surplus of \$4.26 billion. Such amounts include interests in U.S. insurance and reinsurance subsidiaries. Accordingly, Arch Re Bermuda can pay approximately \$1.07 billion to ACGL during 2010 without providing an affidavit to the BMA, as discussed above.

In addition, the ability of our insurance and reinsurance subsidiaries to pay dividends to ACGL and to intermediate parent companies owned by ACGL could be constrained by our dependence on financial strength ratings from independent rating agencies. Our ratings from these agencies depend to a large extent on the capitalization levels of our insurance and reinsurance subsidiaries.

We believe that ACGL has sufficient cash resources and available dividend capacity to service its indebtedness and other current outstanding obligations.

Table of Contents

If our Bermuda reinsurance subsidiary is unable to provide collateral to ceding companies, its ability to conduct business could be significantly and negatively affected.

Arch Re Bermuda is a registered Bermuda insurance company and is not licensed or admitted as an insurer in any jurisdiction in the United States. Because insurance regulations in the United States do not permit insurance companies to take credit for reinsurance obtained from unlicensed or non-admitted insurers on their statutory financial statements unless security is posted, Arch Re Bermuda's contracts generally require it to post a letter of credit or provide other security. Although, to date, Arch Re Bermuda has not experienced any difficulties in providing collateral when required, if we are unable to post security in the form of letters of credit or trust funds when required, the operations of Arch Re Bermuda could be significantly and negatively affected.

We may become subject to taxes in Bermuda after March 28, 2016, which may have a material adverse effect on our results of operations.

Under current Bermuda law, we are not subject to tax on income or capital gains. Furthermore, we have obtained from the Minister of Finance of Bermuda under the Exempted Undertakings Tax Protection Act, 1966, an assurance that, in the event that Bermuda enacts legislation imposing tax computed on profits, income, any capital asset, gain or appreciation, or any tax in the nature of estate duty or inheritance tax, then the imposition of the tax will not be applicable to us or our operations until March 28, 2016. We could be subject to taxes in Bermuda after that date. This assurance does not, however, prevent the imposition of taxes on any person ordinarily resident in Bermuda or any company in respect of its ownership of real property or leasehold interests in Bermuda.

Foreign currency exchange rate fluctuation may adversely affect our financial results.

We write business on a worldwide basis, and our results of operations may be affected by fluctuations in the value of currencies other than the U.S. Dollar. The primary foreign currencies in which we operate are the Euro, the British Pound Sterling and the Canadian Dollar. Changes in foreign currency exchange rates can reduce our revenues and increase our liabilities and costs. We may therefore suffer losses solely as a result of exchange rate fluctuations. In order to mitigate the impact of exchange rate fluctuations, we have invested and expect to continue to invest in securities denominated in currencies other than the U.S. Dollar. In addition, we may replicate investment positions in foreign currencies using derivative financial instruments. Net foreign exchange losses, recorded in the statement of income, for 2009 were \$39.2 million, compared to net foreign exchange gains for 2008 of \$96.6 million. We generally hold investments in foreign currencies which are intended to mitigate our exposure to foreign currency fluctuations in our net insurance liabilities. However, changes in the value of such investments due to foreign currency rate movements are reflected as a direct increase or decrease to shareholders' equity and are not included in the statement of income. There can be no assurances that such arrangements will mitigate the negative impact of exchange rate fluctuations, and we may suffer losses solely as a result of exchange rate fluctuations. From inception through December 31, 2009, and based on currency spot rates at December 31, 2009, Arch Re Bermuda has recorded net premiums written of approximately \$646 million from Euro-denominated contracts, \$398 million from British Pound Sterling-denominated contracts and \$257 million from Canadian Dollar-denominated contracts. In addition, as a result of the current financial and economic environment as well as the potential for additional investment returns, we may not match a portion of our projected liabilities in foreign currencies with investments in the same currencies, which would increase our exposure to foreign currency fluctuations and increase the volatility in our results of operations.

Table of Contents

Certain employees of our Bermuda operations are required to obtain work permits before engaging in a gainful occupation in Bermuda. Required work permits may not be granted or may not remain in effect.

Under Bermuda law, only persons who are Bermudians, spouses of Bermudians, holders of a permanent resident's certificate or holders of a working resident's certificate ("exempted persons") may engage in gainful occupation in Bermuda without an appropriate governmental work permit. Our success may depend in part on the continued services of key employees in Bermuda. A work permit may be granted or renewed upon showing that, after proper public advertisement, no exempted person is available who meets the minimum standards reasonably required by the employer. The Bermuda government's policy places a six-year term limit on individuals with work permits, subject to certain exemptions for key employees. A work permit is issued with an expiry date (up to five years) and no assurances can be given that any work permit will be issued or, if issued, renewed upon the expiration of the relevant term. We consider our key officers in Bermuda who require work permits to be Constantine Jordanou, our Chairman, President and Chief Executive Officer (work permit expires November 12, 2014), John C.R. Hele, our Executive Vice President and Chief Financial Officer (work permit expires April 1, 2014), Marc Grandisson, Chairman and Chief Executive Officer of Arch Worldwide Reinsurance Group (work permit expires May 12, 2010), and Nicolas Papadopoulos, President and Chief Executive Officer of Arch Re Bermuda (work permit expires March 31, 2010). We also have other key positions in Bermuda held by persons who hold work permits subject to renewal. If work permits are not obtained or renewed for our principal employees, we could lose their services, which could materially affect our business.

The enforcement of civil liabilities against us may be difficult.

We are a Bermuda company and in the future some of our officers and directors may be residents of various jurisdictions outside the United States. All or a substantial portion of our assets and the assets of those persons may be located outside the United States. As a result, it may be difficult for you to effect service of process within the United States upon those persons or to enforce in United States courts judgments obtained against those persons.

We have appointed National Registered Agents, Inc., New York, New York, as our agent for service of process with respect to actions based on offers and sales of securities made in the United States. We have been advised by our special Bermuda legal counsel, Conyers Dill & Pearman, that the United States and Bermuda do not currently have a treaty providing for reciprocal recognition and enforcement of judgments of U.S. courts in civil and commercial matters and that a final judgment for the payment of money rendered by a court in the United States based on civil liability, whether or not predicated solely upon the U.S. federal securities laws, would, therefore, not be automatically enforceable in Bermuda. We also have been advised by Conyers Dill & Pearman that a final and conclusive judgment obtained in a court in the United States under which a sum of money is payable as compensatory damages (i.e., not being a sum claimed by a revenue authority for taxes or other charges of a similar nature by a governmental authority, or in respect of a fine or penalty or multiple or punitive damages) may be the subject of an action on a debt in the Supreme Court of Bermuda under the common law doctrine of obligation. Such an action should be successful upon proof that the sum of money is due and payable, and without having to prove the facts supporting the underlying judgment, as long as:

the court which gave the judgment had proper jurisdiction over the parties to such judgment;

such court did not contravene the rules of natural justice of Bermuda;

such judgment was not obtained by fraud;

the enforcement of the judgment would not be contrary to the public policy of Bermuda;

Table of Contents

no new admissible evidence relevant to the action is submitted prior to the rendering of the judgment by the courts of Bermuda; and

there is due compliance with the correct procedures under Bermuda law.

A Bermuda court may impose civil liability on us or our directors or officers in a suit brought in the Supreme Court of Bermuda against us or such persons with respect to a violation of U.S. federal securities laws, provided that the facts surrounding such violation would constitute or give rise to a cause of action under Bermuda law.

Risk Relating to our Preferred Shares

General market conditions and unpredictable factors could adversely affect market prices for our outstanding preferred shares.

There can be no assurance about the market prices for any series of our preferred shares. Several factors, many of which are beyond our control, will influence the market value of such series of preferred shares. Factors that might influence the market value of any series of our preferred shares include, but are not limited to:

whether dividends have been declared and are likely to be declared on any series of our preferred shares from time to time;

our creditworthiness, financial condition, performance and prospects;

whether the ratings on any series of our preferred shares provided by any ratings agency have changed;

the market for similar securities; and

economic, financial, geopolitical, regulatory or judicial events that affect us and/or the insurance or financial markets generally.

Dividends on our preferred shares are non-cumulative.

Dividends on our preferred shares are non-cumulative and payable only out of lawfully available funds of ACGL under Bermuda law. Consequently, if ACGL's board of directors (or a duly authorized committee of the board) does not authorize and declare a dividend for any dividend period with respect to any series of our preferred shares, holders of such preferred shares would not be entitled to receive any such dividend, and such unpaid dividend will not accrue and will never be payable. ACGL will have no obligation to pay dividends for a dividend period on or after the dividend payment date for such period if its board of directors (or a duly authorized committee of the board) has not declared such dividend before the related dividend payment date; if dividends on any series of our preferred shares are authorized and declared with respect to any subsequent dividend period, ACGL will be free to pay dividends on any other series of preferred shares and/or our common shares. In the past, we have not paid dividends on our common shares.

Our preferred shares are equity and are subordinate to our existing and future indebtedness.

Our preferred shares are equity interests and do not constitute indebtedness. As such, our preferred shares will rank junior to all of our indebtedness and other non-equity claims with respect to assets available to satisfy our claims, including in our liquidation. As of December 31, 2009, our total consolidated long-term debt was \$400.0 million, excluding TALF borrowings. We may incur additional debt in the future. Our existing and future indebtedness may restrict payments of dividends on our preferred shares. Additionally, unlike indebtedness, where principal and interest would customarily be payable on specified due dates, in the case of preferred shares like our preferred shares, (1) dividends

Table of Contents

are payable only if declared by the board of directors of ACGL (or a duly authorized committee of the board) and (2) as described above under " Risks Relating to Our Company ACGL is a holding company and is dependent on dividends and other payments from its operating subsidiaries, which are subject to dividend restrictions, to make payments, including the payment of debt service obligations and operating expenses we may incur and any payments of dividends, redemption amounts or liquidation amounts with respect to our preferred shares and common shares," we are subject to certain regulatory and other constraints affecting our ability to pay dividends and make other payments.

The voting rights of holders of our preferred shares are limited.

Holders of our preferred shares have no voting rights with respect to matters that generally require the approval of voting shareholders. The limited voting rights of holders of our preferred shares include the right to vote as a class on certain fundamental matters that affect the preference or special rights of our preferred shares as set forth in the certificate of designations relating to each series of preferred shares. In addition, if dividends on any series of our preferred shares have not been declared or paid for the equivalent of six dividend payments, whether or not for consecutive dividend periods, holders of the outstanding preferred shares of any series will be entitled to vote for the election of two additional directors to our board of directors subject to the terms and to the limited extent as set forth in the certificate of designations relating to such series of preferred shares.

There is no limitation on our issuance of securities that rank equally with or senior to our preferred shares.

We may issue additional securities that rank equally with or senior to our preferred shares without limitation. The issuance of securities ranking equally with or senior to our preferred shares may reduce the amount available for dividends and the amount recoverable by holders of such series in the event of a liquidation, dissolution or winding-up of ACGL.

A classification of any series of preferred shares by the NAIC may impact U.S. insurance companies that purchase such series.

The NAIC, may from time to time, in its discretion, classify securities in insurers' portfolios as either debt, preferred equity or common equity instruments. The NAIC's written guidelines for classifying securities as debt, preferred equity or common equity include subjective factors that require the relevant NAIC examiner to exercise substantial judgment in making a classification. There is therefore a risk that any series of preferred shares may be classified by NAIC as common equity instead of preferred equity. The NAIC classification determines the amount of risk based capital ("RBC") charges incurred by insurance companies in connection with an investment in a security. Securities classified as common equity by the NAIC carry RBC charges that can be significantly higher than the RBC requirement for debt or preferred equity. Therefore, any classification of any series of preferred shares as common equity may adversely affect U.S. insurance companies that hold such series. In addition, a determination by the NAIC to classify such series as common equity may adversely impact the trading of such series in the secondary market.

Risks Relating to Taxation

We and our non-U.S. subsidiaries may become subject to U.S. federal income taxation.

ACGL and its non-U.S. subsidiaries intend to operate their business in a manner that will not cause them to be treated as engaged in a trade or business in the United States and, thus, will not be required to pay U.S. federal income taxes (other than U.S. excise taxes on insurance and reinsurance premium and withholding taxes on certain U.S. source investment income) on their income. However, because there is uncertainty as to the activities which constitute being engaged in a trade or business in the United States, there can be no assurances that the U.S. Internal Revenue Service will not contend

Table of Contents

successfully that ACGL or its non-U.S. subsidiaries are engaged in a trade or business in the United States. If ACGL or any of its non-U.S. subsidiaries were subject to U.S. income tax, our shareholders' equity and earnings could be adversely affected.

Congress has been considering legislation intended to eliminate certain perceived tax advantages of Bermuda and other non-U.S. insurance companies and U.S. insurance companies having Bermuda and other non-U.S. affiliates, including perceived tax benefits resulting principally from reinsurance between or among U.S. insurance companies and their Bermuda affiliates. Some U.S. insurance companies have also been lobbying Congress recently to pass such legislation. In this regard, the American Jobs Creation Act of 2004 (the "Jobs Act") permits the United States Internal Revenue Service ("IRS") to re-allocate, re-characterize or adjust items of income, deduction or certain other items related to a reinsurance agreement between related parties to reflect the proper source, character and amount for each item (in contrast to prior law, which only covered source and character). The Jobs Act also eliminated the tax benefits available to a U.S. company that, after March 4, 2003, changed its legal domicile to a non-U.S. jurisdiction, a transaction commonly known as an inversion. We changed our legal domicile from the U.S. to Bermuda, but were not affected by the anti-inversion rule because our change in domicile occurred in November 2000. The American Infrastructure Investment and Improvement Act of 2008 as passed by the Senate Finance Committee would have made the Jobs Act anti-inversion rule applicable retroactively to inversions that occurred after March 20, 2002. Although this modification would not affect ACGL, no assurance can be given that if reintroduced in the current Congress the final bill will not make the Jobs Act anti-inversion rule applicable retroactively to inversions that occurred on an earlier date, in which case ACGL could be adversely affected. A recently introduced legislative proposal would treat certain foreign corporations as U.S. corporations if such corporation is primarily managed and controlled within the U.S. While we believe ACGL is not primarily managed and controlled within the U.S., there is no assurance that the proposal would not apply to ACGL. Another recent legislative proposal would treat a foreign corporation as a U.S. corporation if it is determined that the foreign corporation was formed or organized principally for the purpose of avoiding being treated as a U.S. corporation. It is uncertain whether this proposal would apply to ACGL, but it would adversely affect us if enacted and found to apply. Another legislative proposal has been introduced that would treat certain "tax haven CFCs" as U.S. corporations for federal income tax purposes. The term "tax haven CFC" would include a Bermuda corporation that is a controlled foreign corporation, but would exclude corporations that engage in the active conduct of a trade or business in Bermuda. It is not clear how this bill would apply to ACGL, which conducts its insurance and reinsurance businesses through its subsidiaries. Further, it is not clear whether this bill was intended to apply to a publicly traded company such as ACGL. There is no assurance that this legislative proposal, if enacted, would not apply to ACGL or any of its non-U.S. subsidiaries. In addition, Congress has recently conducted hearings relating to the tax treatment of reinsurance between affiliates and is reported to be considering legislation that would adversely affect reinsurance between U.S. and non-U.S. affiliates. One such proposal would increase the excise tax rate on reinsurance premiums paid to affiliated non-U.S. reinsurers. A recently introduced legislative proposal in the House of Representatives as well as a prior Senate Finance Committee staff discussion draft and other prior proposals would limit deductions for premiums ceded to affiliated non-U.S. reinsurers above certain levels. The Administration's Fiscal Year 2011 Revenue Proposals contain a similar provision. Enactment of such legislation or proposal as well as other changes in U.S. tax laws, regulations and interpretations thereof to address these issues could adversely affect us.

Reduced tax rate for qualified dividend income received by individuals and other non-corporate holders may not be available in the future.

Dividends received by individuals and other non-corporate United States persons on our common shares or preferred shares in taxable years beginning on or before December 31, 2010 may constitute qualified dividend income that is subject to U.S. federal income tax at the rate applicable for long-term

Table of Contents

capital gains, rather than the higher rates applicable to ordinary income, provided that certain holding period requirements and other conditions are met. For taxable years beginning after December 31, 2010, qualified dividend income will no longer be taxed at the rate applicable for long-term capital gains unless legislation is enacted providing otherwise. In addition, there has been proposed legislation before both Houses of Congress that would exclude shareholders of certain foreign corporations from this advantageous tax treatment. If such legislation were to become law, non-corporate U.S. shareholders would no longer qualify for the capital gains tax rate on the dividends paid by us.

Our non-U.S. companies may be subject to U.K. tax that may have a material adverse effect on our results of operations.

We intend to operate in such a manner so that none of our companies, other than our U.K. subsidiaries ("U.K. Group"), should be resident in the U.K. for tax purposes or have a permanent establishment in the U.K. Accordingly, we do not expect that any companies other than U.K. Group should be subject to U.K. taxation. However, since applicable law and regulations do not conclusively define the activities that constitute conducting business in the U.K. through a permanent establishment, HM Revenue and Customs might contend successfully that one or more of our companies, in addition to the U.K. Group, is conducting business in the U.K. through a permanent establishment in the U.K. and, therefore, subject to U.K. tax, which could have a material adverse effect on us.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our reinsurance group leases a total of approximately 9,100 square feet in Hamilton, Bermuda under a lease expiring in 2012, and approximately 19,200 square feet in Morristown, New Jersey under a lease expiring in 2011. Our property facultative reinsurance group leases approximately 15,000 square feet for its offices throughout the U.S. and in Toronto.

Our insurance group leases approximately 8,750 square feet in Hamilton, Bermuda for our Bermuda insurance operations. The principal U.S. office of our insurance group support operations (excluding underwriting units) is in Jersey City, New Jersey where we lease approximately 106,800 square feet. Such lease expires in 2024. We lease approximately 68,000 square feet in New York City for the headquarters of the U.S. insurance group's underwriting product lines and Northeast regional underwriting operations. Our insurance group also leases a total of approximately 223,300 square feet for its other primary U.S. offices and its office in Canada.

Arch Insurance Europe leases approximately 15,770 square feet in London. Arch Re Denmark, a branch of Arch Insurance Europe and Arch Re Europe, leases approximately 3,650 square feet in Denmark, and Arch Re Europe leases a total of approximately 1,800 square feet in Dublin and Zurich. ACGL leases approximately 4,000 square feet in Bermuda. In addition, Arch Capital Services Inc., a subsidiary of ACGL which provides certain financial, legal and other administrative support services for ACGL and its subsidiaries, leases approximately 16,730 square feet in White Plains, New York.

For 2009, 2008 and 2007, our rental expense, net of income from subleases, was approximately \$16.9 million, \$17.5 million and \$14.8 million, respectively. Our future minimum rental charges for the remaining terms of our existing leases, exclusive of escalation clauses and maintenance costs and net of rental income, will be approximately \$135.3 million. We believe that the above described office space is adequate for our needs. However, as we continue to develop our business, we may open additional office locations during 2010.

Table of Contents**ITEM 3. LEGAL PROCEEDINGS**

We, in common with the insurance industry in general, are subject to litigation and arbitration in the normal course of our business. As of December 31, 2009, we were not a party to any litigation or arbitration which is expected by management to have a material adverse effect on our results of operations and financial condition and liquidity.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****MARKET INFORMATION**

Our common shares are traded on the NASDAQ Stock Market under the symbol "ACGL." For the periods presented below, the high and low sales prices and closing prices for our common shares as reported on the NASDAQ Stock Market were as follows:

	Three Months Ended			
	December 31, 2009	September 30, 2009	June 30, 2009	March 31, 2009
High	\$ 72.25	\$ 68.90	\$ 61.10	\$ 70.00
Low	\$ 65.66	\$ 57.24	\$ 52.26	\$ 44.68
Close	\$ 71.55	\$ 67.54	\$ 58.58	\$ 53.86

	Three Months Ended			
	December 31, 2008	September 30, 2008	June 30, 2008	March 31, 2008
High	\$ 75.31	\$ 80.47	\$ 73.22	\$ 73.00
Low	\$ 54.80	\$ 63.74	\$ 66.26	\$ 65.00
Close	\$ 70.10	\$ 73.03	\$ 66.32	\$ 68.67

On February 23, 2010 the high and low sales prices and the closing price for our common shares as reported on the NASDAQ Stock Market were \$72.80, \$71.96 and \$72.67, respectively.

HOLDERS

As of February 19, 2010, and based on information provided to us by our transfer agent and proxy solicitor, there were 535 holders of record of our common shares and approximately 25,600 beneficial holders of our common shares.

DIVIDENDS

Any determination to pay dividends on ACGL's series A and series B non-cumulative preferred shares or common shares will be at the discretion of ACGL's board of directors (or a duly authorized committee of the board of directors) and will be dependent upon its results of operations, financial condition and other factors deemed relevant by ACGL's board of directors. As a holding company, ACGL will depend on future dividends and other permitted payments from its subsidiaries to pay dividends to its shareholders. ACGL's subsidiaries' ability to pay dividends, as well as its ability to pay dividends, is subject to regulatory, contractual, rating agency and other constraints. So long as any series A or series B non-cumulative preferred shares remain outstanding for any dividend period,

Table of Contents

unless the full dividends for the latest completed dividend period on all outstanding series A and series B non-cumulative preferred shares and parity shares have been declared and paid (or declared and a sum sufficient for the payment thereof has been set aside), (a) no dividend may be paid or declared on ACGL's common shares or any of its other securities ranking junior to the series A and series B non-cumulative preferred shares (other than a dividend payable solely in common shares or in such other junior securities) and (b) no common shares or other junior shares may be purchased, redeemed or otherwise acquired for consideration by ACGL, directly or indirectly (other than (i) as a result of a reclassification of junior shares for or into other junior shares, or the exchange or conversion of one junior share for or into another junior share, (ii) through the use of the proceeds of a substantially contemporaneous sale of junior shares and (iii) as permitted by the bye-laws of ACGL in effect on the date of issuance of the series A and series B non-cumulative preferred shares).

ISSUER PURCHASES OF EQUITY SECURITIES

The following table summarizes our purchases of our common shares for the 2009 fourth quarter:

Period	Total Number of Shares Purchased (1)		Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)		Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan or Programs (2)
	Total Number of Shares Purchased (1)	Average Price Paid per Share		Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan or Programs (2)	
10/1/2009-10/31/2009	10,022	\$ 66.78	9,940	\$ 349,094		
11/1/2009-11/30/2009	2,780,116	\$ 69.34	2,780,116	\$ 1,156,610		
12/1/2009-12/31/2009	2,358,246	\$ 70.06	2,358,215	\$ 991,403		
Total	5,148,384	\$ 69.67	5,148,271	\$ 991,403		

- (1) Includes repurchases by ACGL of shares, from time to time, from employees in order to facilitate the payment of withholding taxes on restricted shares granted and the exercise of stock appreciation rights. We purchased these shares at their fair market value, as determined by reference to the closing price of our common shares on the day the restricted shares vested or the stock appreciation rights were exercised.
- (2) In November 2009, the board of directors of ACGL authorized the investment of up to an additional \$1.0 billion in ACGL's common shares through a share repurchase program. Repurchases under this authorization may be effected from time to time in open market or privately negotiated transactions through December 31, 2011. The board of directors of ACGL had previously authorized the investment of up to \$1.5 billion in ACGL's common shares. Since the inception of the share repurchase program, ACGL has repurchased approximately 22.0 million common shares for an aggregate purchase price of \$1.51 billion. The timing and amount of the repurchase transactions under this program will depend on a variety of factors, including market conditions and corporate and regulatory considerations.

Table of Contents

PERFORMANCE GRAPH

The following graph compares the cumulative total shareholder return on our common shares for each of the last five years through December 31, 2009 to the cumulative total return, assuming reinvestment of dividends, of (1) Standard & Poor's ("S&P") 500 Composite Stock Index ("S&P 500 Index") and (2) the S&P 500 Property & Casualty Insurance Index. The share price performance presented below is not necessarily indicative of future results.

CUMULATIVE TOTAL SHAREHOLDER RETURN (1)(2)(3)

-
- (1) Stock price appreciation plus dividends.
 - (2) The above graph assumes that the value of the investment was \$100 on December 31, 2004. The closing price for our common shares on December 31, 2009 (i.e., the last trading day in 2009) was \$71.55.
 - (3) This graph is not "soliciting material," is not deemed filed with the SEC and is not to be incorporated by reference in any filing by us under the Securities Act of 1933, as amended or the Securities and Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Table of Contents**ITEM 6. SELECTED FINANCIAL DATA**

The following table sets forth summary historical consolidated financial and operating data for the five-year period ended December 31, 2009 and should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the related notes.

(U.S. dollars in thousands except share data)	Years Ended December 31,				
	2009	2008	2007	2006	2005
Statement of Income Data:					
Revenues:					
Net premiums written	\$ 2,763,112	\$ 2,805,726	\$ 2,901,936	\$ 3,017,418	\$ 3,138,772
Net premiums earned	2,842,745	2,845,454	2,944,650	3,081,665	2,977,716
Net investment income	390,131	468,080	463,241	377,534	232,902
Equity in net income (loss) of investment funds accounted for using the equity method	167,819	(178,608)	(171)	2,671	
Net realized gains (losses)	143,582	(3,939)	58,338	(19,437)	(53,456)
Total revenues	3,501,622	2,966,813	3,452,445	3,452,678	3,167,529
Income before income taxes	897,653	304,505	873,544	739,893	285,435
Net income	\$ 876,945	\$ 290,966	\$ 857,943	\$ 713,214	\$ 256,486
Preferred dividends	(25,844)	(25,844)	(25,844)	(20,655)	
Net income available to common shareholders	\$ 851,101	\$ 265,122	\$ 832,099	\$ 692,559	\$ 256,486
Diluted net income per common share	\$ 13.74	\$ 4.09	\$ 11.28	\$ 9.08	\$ 3.43
Cash dividends per share					
After-tax operating income available to common shareholders (1)	\$ 651,805	\$ 537,386	\$ 846,458	\$ 734,919	\$ 284,197
After-tax operating income available to common shareholders per share diluted (1)	\$ 10.53	\$ 8.29	\$ 11.47	\$ 9.63	\$ 3.80
After-tax operating return on average common equity (2)	18.3%	15.8%	24.3%	25.6%	12.0%
Weighted average common shares and common share equivalents outstanding diluted	61,927,132	64,789,052	73,762,419	76,246,725	74,709,858

(1) After-tax operating income available to common shareholders is defined as net income available to common shareholders, excluding net realized gains or losses, net impairment losses included in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses, net of income taxes. The presentation of after-tax operating income available to common shareholders is a "non-GAAP financial measure" as defined in Regulation G. See "Management's Discussion and Analysis General Comment on Non-GAAP Financial Measures" for further details.

(2) Equals after-tax operating income available to common shareholders divided by the average of beginning and ending common shareholders' equity for each period presented.

Table of Contents

(U.S. dollars in thousands except share data)	December 31,				
	2009	2008	2007	2006	2005
Balance Sheet Data:					
Total investments and cash (1)	\$ 11,325,112	\$ 9,992,239	\$ 10,129,663	\$ 9,319,148	\$ 7,119,450
Premiums receivable	595,030	628,951	729,628	749,961	672,902
Unpaid losses and loss adjustment expenses recoverable	1,659,500	1,729,135	1,609,619	1,552,157	1,389,768
Total assets	15,375,790	14,616,545	15,624,267	14,312,467	11,488,436
Reserves for losses and loss adjustment expenses:					
Before unpaid losses and loss adjustment expenses recoverable	7,873,412	7,666,957	7,092,452	6,463,041	5,452,826
Net of unpaid losses and loss adjustment expenses recoverable	6,213,912	5,937,822	5,482,833	4,910,884	4,063,058
Unearned premiums:					
Before prepaid reinsurance premiums	1,433,331	1,526,682	1,765,881	1,791,922	1,699,691
Net of prepaid reinsurance premiums	1,155,346	1,222,975	1,285,419	1,321,784	1,377,256
Senior notes	300,000	300,000	300,000	300,000	300,000
Revolving credit agreement borrowings	100,000	100,000			
Total liabilities	11,052,441	11,183,580	11,588,456	10,721,848	9,007,909
Common shareholders' equity	\$ 3,998,349	\$ 3,107,965	\$ 3,710,811	\$ 3,265,619	\$ 2,480,527
Preferred shareholders' equity	325,000	325,000	325,000	325,000	
Total shareholders' equity	\$ 4,323,349	\$ 3,432,965	\$ 4,035,811	\$ 3,590,619	\$ 2,480,527
Book value per common share (2)	\$ 73.01	\$ 51.36	\$ 55.12	\$ 43.97	\$ 33.82
Common shares outstanding (3)	54,761,678	60,511,974	67,318,466	74,270,466	73,334,870

- (1) In our securities lending transactions, we receive collateral in excess of the market value of the fixed maturities and short-term investments pledged under securities lending agreements. For purposes of this table, we have excluded collateral received and reinvested and included "fixed maturities and short-term investments pledged under securities lending agreements, at market value."
- (2) Excludes the effects of stock options and restricted stock units.
- (3) Reflects the impact of our share repurchase program, which resulted in repurchases of 6.7 million, 7.5 million and 7.8 million common shares, respectively, in the years ended December 31, 2009, 2008 and 2007.

Table of Contents

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis contains forward-looking statements which involve inherent risks and uncertainties. All statements other than statements of historical fact are forward-looking statements. These statements are based on our current assessment of risks and uncertainties. Actual results may differ materially from those expressed or implied in these statements and, therefore, undue reliance should not be placed on them. Important factors that could cause actual events or results to differ materially from those indicated in such statements are discussed in this report, including the sections entitled "Cautionary Note Regarding Forward-Looking Statements," and "Risk Factors."

This discussion and analysis should be read in conjunction with our audited consolidated financial statements and notes thereto presented under Item 8. Tabular amounts are in U.S. Dollars in thousands, except share amounts, unless otherwise noted.

GENERAL

Overview

Arch Capital Group Ltd. ("ACGL" and, together with its subsidiaries, "we" or "us") is a Bermuda public limited liability company with over \$4.7 billion in capital at December 31, 2009 and, through operations in Bermuda, the United States, Europe and Canada, writes insurance and reinsurance on a worldwide basis. While we are positioned to provide a full range of property and casualty insurance and reinsurance lines, we focus on writing specialty lines of insurance and reinsurance. It is our belief that our underwriting platform, our experienced management team and our strong capital base that is unencumbered by significant pre-2002 risks have enabled us to establish a strong presence in the insurance and reinsurance markets.

The worldwide insurance and reinsurance industry is highly competitive and has traditionally been subject to an underwriting cycle in which a hard market (high premium rates, restrictive underwriting standards, as well as terms and conditions, and underwriting gains) is eventually followed by a soft market (low premium rates, relaxed underwriting standards, as well as broader terms and conditions, and underwriting losses). Insurance market conditions may affect, among other things, the demand for our products, our ability to increase premium rates, the terms and conditions of the insurance policies we write, changes in the products offered by us or changes in our business strategy.

The financial results of the insurance and reinsurance industry are influenced by factors such as the frequency and/or severity of claims and losses, including natural disasters or other catastrophic events, variations in interest rates and financial markets, changes in the legal, regulatory and judicial environments, inflationary pressures and general economic conditions. These factors influence, among other things, the demand for insurance or reinsurance, the supply of which is generally related to the total capital of competitors in the market.

The weather-related catastrophic events that occurred in the second half of 2005 caused significant industry losses and led to a strengthening of rating agency capital requirements for catastrophe-exposed business. The 2005 events also resulted in substantial improvements in market conditions in property and certain marine lines of business and slowed declines in premium rates in other lines. During 2006 and 2007, excellent industry results led to a significant increase in capacity, competition intensified and, in general, prices declined in all lines of business. During 2008 and 2009, we increased our writings in property and certain marine lines of business in order to take advantage of market conditions and these lines represented a larger proportion of our overall book of business than in prior periods.

Table of Contents

Current Outlook

During the second half of 2008, the financial markets experienced significant adverse credit events and a loss of liquidity, which have reduced the amount and availability of capital in the insurance industry. In addition, certain of our competitors have experienced significant financial difficulties. During the first six months of 2009, we experienced rate stabilization and some improvements in rates. However, with no significant catastrophic activity in the 2009 third quarter and substantial improvements in market values across most investment sectors, the degree of rate improvement we saw in the first six months of 2009 was moderated and the pricing environment is basically unchanged. The current economic conditions could continue to have a material impact on the frequency and severity of claims and therefore could negatively impact our underwriting returns. In addition, volatility in the financial markets could continue to significantly affect our investment returns, reported results and shareholders' equity. We consider the potential impact of economic trends in the estimation process for establishing unpaid losses and loss adjustment expenses and in determining our investment strategies. We continue to believe that the most attractive area from a pricing point of view remains U.S. catastrophe-exposed business. We expect that our writings in this business will continue to represent a significant proportion of our overall book, which could increase the volatility of our operating results.

Natural Catastrophe Risk

We monitor our natural catastrophe risk globally for all perils and regions, in each case, where we believe there is significant exposure. Our models employ both proprietary and vendor-based systems and include cross-line correlations for property, marine, offshore energy, aviation, workers compensation and personal accident. Currently, we seek to limit our 1-in-250 year return period net probable maximum pre-tax loss from a severe catastrophic event in any geographic zone to approximately 25% of total shareholders' equity. We reserve the right to change this threshold at any time. Based on in-force exposure estimated as of January 1, 2010, our modeled peak zone catastrophe exposure is a hurricane affecting the Florida Tri-County area, with a net probable maximum pre-tax loss of \$750 million, compared to \$826 million as of October 1, 2009. Our exposures to other perils, such as U.S. earthquake and international events, are less than the exposures arising from U.S. hurricanes. As of January 1, 2010, our modeled peak zone earthquake exposure (Los Angeles area earthquake) represented less than 80% of our peak zone hurricane exposure, and our modeled peak zone international exposure (United Kingdom windstorm) is substantially less than both our peak zone hurricane and earthquake exposures. Net probable maximum pre-tax loss estimates are net of expected reinsurance recoveries, before income tax and before excess reinsurance reinstatement premiums. Loss estimates are reflective of the zone indicated and not the entire portfolio. Since hurricanes and windstorms can affect more than one zone and make multiple landfalls, our loss estimates include clash estimates from other zones. The loss estimates shown above do not represent our maximum exposures and it is highly likely that our actual incurred losses would vary materially from the modeled estimates. There can be no assurances that we will not suffer a net loss greater than 25% of our total shareholders' equity from one or more catastrophic events due to several factors, including the inherent uncertainties in estimating the frequency and severity of such events and the margin of error in making such determinations resulting from potential inaccuracies and inadequacies in the data provided by clients and brokers, the modeling techniques and the application of such techniques or as a result of a decision to change the percentage of shareholders' equity exposed to a single catastrophic event. In addition, actual losses may increase if our reinsurers fail to meet their obligations to us or the reinsurance protections purchased by us are exhausted or are otherwise unavailable. See "Risk Factors Risk Relating to Our Industry" and "Management's Discussion and Analysis of Financial Condition and Results of Operations Natural and Man-Made Catastrophic Events."

Table of Contents

Financial Measures

Management uses the following three key financial indicators in evaluating our performance and measuring the overall growth in value generated for ACGL's common shareholders.

Book Value per Common Share

Book value per common share represents total common shareholders' equity divided by the number of common shares outstanding. Management uses growth in book value per common share as a key measure of the value generated for our common shareholders each period and believes that book value per common share is the key driver of ACGL's share price over time. Book value per common share is impacted by, among other factors, our underwriting results, investment returns and share repurchase activity, which has an accretive or dilutive impact on book value per common share depending on the purchase price.

Book value per common share was \$73.01 at December 31, 2009, compared to \$51.36 at December 31, 2008 and \$55.12 at December 31, 2007. The 42.2% growth in 2009 was generated through the underwriting results of our insurance and reinsurance operations and investment returns which reflected recoveries in value across most asset classes. From December 31, 2004 to 2009, book value per common share increased by an average of 18.7%.

Operating Return on Average Common Equity

Operating return on average common equity ("Operating ROAE") represents after-tax operating income available to common shareholders divided by the average of beginning and ending common shareholders' equity during the period. After-tax operating income available to common shareholders, a "non-GAAP measure" as defined in the SEC rules, represents net income available to common shareholders, excluding net realized gains or losses, net impairment losses recognized in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses, net of income taxes. Management uses Operating ROAE as a key measure of the return generated to common shareholders and has set an objective to achieve an average Operating ROAE of 15% or greater over the insurance cycle, which it believes to be an attractive return to common shareholders given the risks we assume. See "Comment on Non-GAAP Financial Measures."

Our Operating ROAE was 18.3% for 2009, compared to 15.8% for 2008 and 24.3% for 2007. The Operating ROAE for 2009 benefitted from a lower level of catastrophic events than in the 2008 period, partially offset by the impact of declining interest yields and current insurance market conditions.

Total Return on Investments

Total return on investments includes net investment income, equity in net income or loss of investment funds accounted for using the equity method, net realized gains and losses and the change in unrealized gains and losses generated by our investment portfolio. Total return is calculated on a pre-tax basis and before investment expenses and includes the effect of financial market conditions along with foreign currency fluctuations. Management uses total return on investments as a key measure of the return generated to common shareholders on the capital held in the business, and compares the return generated by our investment portfolio against benchmark returns which we measured our portfolio against during the periods. The benchmark return is a weighted average of the benchmarks assigned to each of our investment managers and vary based on the nature of the portfolios under management.

For 2009, 2008 and 2007, set forth below is the pre-tax total return (before investment expenses) of our investment portfolio (including fixed maturities, short-term investments and fixed maturities and short-term investments pledged under securities lending agreements) compared to the benchmark

Table of Contents

return against which we measured our portfolio during the year. Our investment expenses were approximately 0.20% of average invested assets in 2009, compared to 0.14% in 2008 and 0.15% in 2007.

	Arch Portfolio	Benchmark Return
Pre-tax total return (before investment expenses):		
Year ended December 31, 2009	11.28%	9.71%
Year ended December 31, 2008	(2.84)%	(1.42)%
Year ended December 31, 2007	6.52%	6.97%

Comment on Non-GAAP Financial Measures

Throughout this filing, we present our operations in the way we believe will be the most meaningful and useful to investors, analysts, rating agencies and others who use our financial information in evaluating the performance of our company. This presentation includes the use of after-tax operating income available to common shareholders, which is defined as net income available to common shareholders, excluding net realized gains or losses, net impairment losses included in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses, net of income taxes. The presentation of after-tax operating income available to common shareholders is a "non-GAAP financial measure" as defined in Regulation G. The reconciliation of such measure to net income available to common shareholders (the most directly comparable GAAP financial measure) in accordance with Regulation G is included under "Results of Operations" below.

We believe that net realized gains or losses, net impairment losses included in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses in any particular period are not indicative of the performance of, or trends in, our business. Although net realized gains or losses, net impairment losses included in earnings, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses are an integral part of our operations, the decision to realize investment gains or losses, the recognition of net impairment losses, the recognition of equity in net income or loss of investment funds accounted for using the equity method and the recognition of foreign exchange gains or losses are independent of the insurance underwriting process and result, in large part, from general economic and financial market conditions. Furthermore, certain users of our financial information believe that, for many companies, the timing of the realization of investment gains or losses is largely opportunistic. In addition, net impairment losses included in earnings on our investments represent other-than-temporary declines in expected recovery values on securities without actual realization. The use of the equity method on certain of our investments in certain funds that invest in fixed maturity securities is driven by the ownership structure of such funds (either limited partnerships or limited liability companies). In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on our proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). This method of accounting is different from the way we account for our other fixed maturity securities and the timing of the recognition of equity in net income or loss of investment funds accounted for using the equity method may differ from gains or losses in the future upon sale or maturity of such investments. Due to these reasons, we exclude net realized gains or losses, equity in net income or loss of investment funds accounted for using the equity method and net foreign exchange gains or losses from the calculation of after-tax operating income available to common shareholders.

We believe that showing net income available to common shareholders exclusive of the items referred to above reflects the underlying fundamentals of our business since we evaluate the performance of and manages our business to produce an underwriting profit. In addition to presenting

Table of Contents

net income available to common shareholders, we believe that this presentation enables investors and other users of our financial information to analyze our performance in a manner similar to how management analyzes performance. We also believe that this measure follows industry practice and, therefore, allows the users of financial information to compare our performance with our industry peer group. We believe that the equity analysts and certain rating agencies which follow us and the insurance industry as a whole generally exclude these items from their analyses for the same reasons.

RESULTS OF OPERATIONS

The following table summarizes, on an after-tax basis, our consolidated financial data, including a reconciliation of after-tax operating income available to common shareholders to net income available to common shareholders:

	Years Ended December 31,		
	2009	2008	2007
After-tax operating income available to common shareholders	\$ 651,805	\$ 537,386	\$ 846,458
Net realized gains (losses), net of tax	137,428	(9,132)	58,120
Net impairment losses recognized in earnings, net of tax	(66,056)	(181,023)	(28,035)
Equity in net income (loss) of investment funds accounted for using the equity method, net of tax	167,819	(178,608)	(171)
Net foreign exchange gains (losses), net of tax	(39,895)	96,499	(44,273)
 Net income available to common shareholders	 \$ 851,101	 \$ 265,122	 \$ 832,099

Net income available to common shareholders was \$851.1 million for 2009, compared to \$265.1 million for 2008 and \$832.1 million for 2007. After-tax operating income available to common shareholders was \$651.8 million for 2009, compared to \$537.4 million in 2008 and \$846.5 million in 2007. The increase in after-tax operating income in 2009 compared to 2008 resulted from a lower level of catastrophic events while reflecting the impact of declining interest yields and insurance market conditions. As discussed in "Segment Information" below, underwriting results for 2008 reflected estimated after-tax net losses of \$287.4 million related to Hurricanes Gustav and Ike, after reinsurance recoveries, and net of reinstatement premiums. The decline in the after-tax operating income available to common shareholders from 2007 to 2008 resulted from such after-tax net catastrophic losses. Our Operating ROAE for 2009 was 18.3%, compared to 15.8% for 2008 and 24.3% for 2007.

Segment Information

We classify our businesses into two underwriting segments insurance and reinsurance and corporate and other (non-underwriting). Accounting guidance regarding disclosures about segments of an enterprise and related information requires certain disclosures about operating segments in a manner that is consistent with how management evaluates the performance of the segment. For a description of our underwriting segments, refer to note 3, "Segment Information," of the notes accompanying our consolidated financial statements. Management measures segment performance based on underwriting income or loss.

Table of Contents*Insurance Segment*

The following table sets forth our insurance segment's underwriting results:

	Years Ended December 31,		
	2009	2008	2007
Gross premiums written	\$ 2,512,127	\$ 2,490,919	\$ 2,660,302
Net premiums written	1,704,284	1,657,603	1,717,548
Net premiums earned	\$ 1,688,519	\$ 1,675,089	\$ 1,702,343
Fee income	3,362	3,445	5,063
Losses and loss adjustment expenses	(1,139,415)	(1,194,528)	(1,077,769)
Acquisition expenses, net	(238,261)	(224,539)	(201,703)
Other operating expenses	(281,340)	(288,883)	(276,388)
Underwriting income (loss)	\$ 32,865	(\$ 29,416)	\$ 151,546
Underwriting Ratios			
Loss ratio	67.5%	71.3%	63.3%
Acquisition expense ratio (1)	13.9%	13.2%	11.7%
Other operating expense ratio	16.7%	17.2%	16.2%
Combined ratio	98.1%	101.7%	91.2%

(1)

The acquisition expense ratio is adjusted to include certain fee income.

The insurance segment's underwriting income was \$32.9 million for 2009, compared to a \$29.4 million underwriting loss for 2008 and underwriting income of \$151.5 million for 2007. The combined ratio for the insurance segment was 98.1% for 2009, compared to 101.7% for 2008 and 91.2% for 2007. During 2008, the insurance segment incurred estimated pre-tax net losses, after reinsurance and net of reinstatement premiums, related to Hurricanes Gustav and Ike of \$98.1 million. Before reinsurance, such estimated losses were \$214.3 million. The components of the insurance segment's underwriting income or loss are discussed below.

Premiums Written.

2009 versus 2008: Gross premiums written by the insurance segment in 2009 were 0.9% higher than 2008, with growth in executive assurance, national accounts casualty, property, and travel and accident business, primarily resulting from new business, in addition to renewal rate increases for the executive assurance business. Such growth was largely offset by reductions in casualty, surety, professional liability, and other business, as the insurance segment continued to maintain underwriting discipline in response to the current market environment. In addition, the program business experienced growth resulting from new business. However, such growth in the program business was offset by a reduction resulting from \$10.9 million of premium adjustments related to involuntary pools in the 2008 period (\$10.5 million on an earned basis). Net premiums written increased by 2.8%, reflecting changes in the mix of business noted above, reinstatement premiums and the impact of changes in reinsurance structure.

2008 versus 2007: Gross premiums written by the insurance segment were 6.4% lower than 2007, as the insurance segment continued to maintain underwriting discipline in response to the market environment with reductions across most specialty lines of business. Net premiums written decreased by 3.5%, reflecting the market environment, reinstatement premiums and the impact of changes in reinsurance structure.

Table of Contents

For information regarding net premiums written produced by major line of business and geographic location, refer to note 3, "Segment Information," of the notes accompanying our consolidated financial statements.

Net Premiums Earned. Net premiums earned by the insurance segment in 2009 increased 0.8% from 2008, and reflects the increase in net premiums written over the previous five quarters, including changes in reinsurance structure and the mix and type of business written. Net premiums earned by the insurance segment in 2008 decreased 1.6% from 2007.

Losses and Loss Adjustment Expenses. The table below shows the components of the insurance segment's loss ratio:

	Years Ended December 31,		
	2009	2008	2007
Current year	70.3%	76.0%	64.0%
Prior period reserve development	(2.8)%	(4.7)%	(0.7)%
Loss ratio	67.5%	71.3%	63.3%

Current Year Loss Ratio.

2009 versus 2008: The insurance segment's current year loss ratio was 5.7 points lower in 2009 compared to 2008, primarily due to the lack of any significant catastrophic event activity in 2009, while the 2008 current year loss ratio included 7.2 points of catastrophic activity, primarily Hurricanes Gustav and Ike. The 2009 loss ratio also reflected increases in expected loss ratios across a number of lines of business, primarily due to the anticipated impact of rate changes, partially offset by a lower level of large, specific risk loss activity and changes in the mix of business.

2008 versus 2007: The insurance segment's current year loss ratio was 12.0 points higher in 2008 compared to 2007, primarily due to the 7.2 points of catastrophic activity in 2008 and large, specific risk loss activity during 2008, while the 2007 current year loss ratio did not include any significant catastrophic activity.

Prior period reserve development.

2009 prior period reserve development: The insurance segment's net favorable development of \$47.1 million, or 2.8 points, was primarily due to reductions in reserves in medium-tailed and short-tailed lines of business. Such amount included favorable development in professional liability reserves from the 2005 to 2007 accident years (*i.e.*, the year in which a loss occurred) of \$6.3 million, \$16.1 million and \$8.6 million, respectively, and adverse development on the 2008 accident year of \$9.4 million. In addition, favorable development on construction reserves from the 2005 and 2006 accident years contributed \$10.6 million and \$5.4 million, respectively, which resulted from lower than expected large loss activity. Favorable development in short-tailed lines primarily consisted of reductions in property reserves from the 2007 and 2008 accident years of \$9.4 million and \$11.1 million, respectively. Offsetting favorable development on medium-tailed and short-tailed lines of business were increases in executive assurance reserves for the 2007 and 2008 accident years of \$14.8 million and \$28.3 million, respectively, due to large specific risk loss activity relating to the credit crisis, partially offset by favorable development in the 2004 to 2006 accident years of \$4.1 million, \$17.5 million and \$3.6 million, respectively. Reductions in the 2004 to 2006 accident years relate to less large loss activity than expected in commercial D&O, a distinctive downward trend in security class action cases filed from 2004 through 2006, and to the claims-made nature of the coverage. The claims-made aspect

Table of Contents

eliminates the potential of new claims being reported for these years, and narrows the remaining liability to changes in reserve estimation for claims which have already been reported.

2008 prior period reserve development: The insurance segment's net favorable development of \$79.0 million, or 4.7 points, was primarily due to reductions in reserves in medium-tailed and long-tailed lines of business. Over 80 percent of this development is related to the executive assurance and professional liability lines of business. Executive assurance reserves developed favorably for accident years 2004 through 2006 by \$15.8 million, \$17.3 million, and \$17.6 million, respectively. These reductions relate to less large loss activity than expected in commercial D&O, a distinctive downward trend in security class action cases filed from 2004 through 2006, and to the claims-made nature of the coverage. Accident year 2007 experienced unfavorable development of \$19.7 million relating to the re-evaluation of claims given additional information available during 2008 regarding the impact of the credit crisis. Reserves for professional liability developed favorably as well, with the majority of the favorable development relating to accident years 2003 through 2005 with \$5.2 million, \$8.1 million, and \$19.1 million, respectively.

2007 prior period reserve development: The insurance segment's net favorable reserve development of \$12.7 million, or 0.7 points, was primarily due to reductions in reserves in medium-tailed and long-tailed lines of business. Such amount included favorable development in executive assurance reserves from the 2003 to 2005 accident years of \$3.0 million, \$13.4 million and \$11.6 million, respectively, and favorable development in professional liability reserves from the 2003 to 2006 accident years of \$5.5 million, \$5.3 million, \$4.3 million and \$2.9 million, respectively. These reductions relate to less large loss activity than expected, the downward trend in security class action cases filed from 2003 through 2006 for executive assurance, and to the claims-made nature of these coverages. Adverse development on short-tailed lines primarily resulted from a \$58.1 million increase in surety reserves in the 2006 accident year due to large, specific risk loss activity, which was partially offset by reductions in the 2004 and 2005 accident years of \$2.6 million and \$14.6 million, respectively, which was partially offset by reductions in property reserves in the 2004 and 2005 accident years of \$2.6 million and \$14.6 million, respectively. Such amount was partially offset by reductions in property reserves in the 2004 and 2005 accident years of \$10.2 million and \$3.8 million, respectively, due to lower than expected large loss activity in the property and marine units.

Underwriting Expenses.

2009 versus 2008: The insurance segment's underwriting expense ratio was 30.6% in 2009, compared to 30.4% in 2008. The acquisition expense ratio was 13.9% for 2009, compared to 13.2% for 2008. The acquisition expense ratio is influenced by, among other things, (1) the amount of ceding commissions received from unaffiliated reinsurers, (2) the amount of business written on a surplus lines (non-admitted) basis and (3) mix of business. In addition, the 2009 acquisition expense ratio reflected an increase of 0.2 points related to the estimated net favorable development in prior year loss reserves, compared to a 0.9 point increase in 2008. The comparison of the 2009 and 2008 acquisition expense ratios reflects changes in the form of reinsurance ceded and the mix of business. The insurance segment's other operating expense ratio was 16.7% for 2009, compared to 17.2% in 2008. The operating expense ratio for the 2008 period included approximately 0.7 points of costs related to an expense management plan which incorporated workforce reductions and the relocation of certain of the insurance segment's U.S. operations. The 2009 operating expenses reflect expenses related to an expansion of the insurance segment's presence in the executive assurance and professional liability lines of business, partially offset by the benefits of the expense management plan implemented in 2008.

2008 versus 2007: The underwriting expense ratio for the insurance segment was 30.4% in 2008, compared to 27.9% for 2007. The acquisition expense ratio was 13.2% for 2008, compared to 11.7% for 2007. The acquisition expense ratio in 2008 reflects changes in the form of reinsurance ceded and the

Table of Contents

mix of business and also included 0.9 points related to favorable prior year loss development, compared to 0.5 points for 2007. The insurance segment's other operating expense ratio was 17.2% for 2008, compared to 16.2% for 2007, with the increase due in part to a lower level of net premiums earned in 2008. As discussed above, operating expenses in 2008 included approximately 0.7 points related to the expense management plan noted above.

Reinsurance Segment

The following table sets forth our reinsurance segment's underwriting results:

	Years Ended December 31,		
	2009	2008	2007
Gross premiums written	\$ 1,093,940	\$ 1,201,903	\$ 1,517,645
Net premiums written	1,058,828	1,148,123	1,184,388
Net premiums earned	\$ 1,154,226	\$ 1,170,365	\$ 1,242,307
Fee income	100	1,261	2,473
Losses and loss adjustment expenses	(515,259)	(654,216)	(566,401)
Acquisition expenses, net	(255,299)	(265,970)	(278,828)
Other operating expenses	(80,567)	(78,421)	(81,059)
Underwriting income	\$ 303,201	\$ 173,019	\$ 318,492
Underwriting Ratios			
Loss ratio	44.6%	55.9%	45.6%
Acquisition expense ratio	22.1%	22.7%	22.4%
Other operating expense ratio	7.0%	6.7%	6.5%
Combined ratio	73.7%	85.3%	74.5%

The reinsurance segment's underwriting income was \$303.2 million for 2009, compared to \$173.0 million for 2008 and \$318.5 million for 2007. The combined ratio for the reinsurance segment was 73.7% for 2009, compared to 85.3% for 2008 and 74.5% for 2007. During 2008, the reinsurance segment incurred estimated pre-tax net losses, after reinsurance and net of reinstatement premiums, related to Hurricanes Gustav and Ike of \$197.4 million. Before reinsurance, such estimated losses were \$221.5 million. The components of the reinsurance segment's underwriting income are discussed below.

Premiums Written.

2009 versus 2008: Gross premiums written by the reinsurance segment in 2009 were 9.0% lower than 2008, primarily due to reductions in casualty, marine and aviation, and other specialty business. The decrease in casualty and marine and aviation business resulted from the impact of non-renewals of a number of contracts and contract participation decreases, while the lower level of other specialty business was due to the non-renewal of a non-standard auto treaty in addition to impacts of non-renewals and contract participation decreases. The decreases were partially offset by increases in property business which resulted from new business, the renewal of a two-year treaty, and a \$28 million increase in writings by the reinsurance segment's property facultative operation.

Commencing in 2006, Arch Reinsurance Ltd. ("Arch Re Bermuda") ceded certain lines of property and marine premiums written under a quota share reinsurance treaty (the "Treaty") to Flatiron Re Ltd. ("Flatiron"). Under the Treaty, Flatiron assumed a 45% quota share of certain lines of property and marine business underwritten by Arch Re Bermuda for the 2006 and 2007 underwriting years (the percentage ceded was increased from 45% to 70% of covered business bound from June 28, 2006 until August 15, 2006 provided such business did not incept beyond September 30, 2006). On December 31,

Table of Contents

2007, the Treaty expired by its terms. See note 4, "Reinsurance," of the notes accompanying our consolidated financial statements for further details on the Treaty with Flatiron.

Ceded premiums written by the reinsurance segment were 3.2% of gross premiums written for 2009, compared to 4.5% for 2008. In 2009, Arch Re Bermuda ceded \$3.8 million of premiums written, or 0.3%, under the Treaty with Flatiron discussed above, compared to \$24.7 million, or 2.1%, in 2008, with the lower level due to the expiration of the treaty. Net premiums written by the reinsurance segment in 2009 were 7.8% lower than 2008, primarily due to the items noted above. For information regarding net premiums written produced by major line of business and geographic location, refer to note 3, "Segment Information," of the notes accompanying our consolidated financial statements.

2008 versus 2007: Gross premiums written by the reinsurance segment in 2008 were 20.8% lower than 2007. For its January 1, 2008 renewals, Arch Re Bermuda adjusted its book of business in light of the expiration of the Treaty with Flatiron discussed above, and 2008 writings in certain property and marine lines were reduced accordingly. Other reductions in the reinsurance segment's book of business resulted from continued competition which led to non-renewals or lower shares written, partially offset by an increase in writings by the reinsurance segment's property facultative operation.

Ceded premiums written by the reinsurance segment were 4.5% of gross premiums written for 2008, compared to 22.0% for 2007. In 2008, Arch Re Bermuda ceded \$24.7 million of premiums written, or 2.1%, under the Treaty to Flatiron, compared to \$311.4 million, or 20.5%, in 2007, with the lower level due to the expiration of the Treaty. Net premiums written by the reinsurance segment in 2008 were 3.1% lower than 2007, primarily due to the items noted above.

Net Premiums Earned. Net premiums earned in 2009 were 1.4% lower than 2008, which was lower than the 7.8% decline in net premiums written as such decline primarily occurred during the 2009 fourth quarter and will result in lower net premiums earned in 2010 compared to 2009. Net premiums earned in 2008 were 5.8% lower than 2007, and reflected changes in net premiums written over the previous five quarters, including the mix and type of business written. On an earned basis, Arch Re Bermuda ceded \$22.0 million to Flatiron in 2009, compared to \$151.4 million in 2008 and \$282.2 million in 2007.

Losses and Loss Adjustment Expenses. The table below shows the components of the reinsurance segment's loss ratio:

	Years Ended December 31,		
	2009	2008	2007
Current year	56.9%	75.7%	59.5%
Prior period reserve development	(12.3)%	(19.8)%	(13.9)%
Loss ratio	44.6%	55.9%	45.6%

Current Year Loss Ratio.

2009 versus 2008: The reinsurance segment's current year loss ratio was 18.8% lower in 2009 than in 2008, and benefitted from a higher level of property and short-tail business and a minimal level of catastrophic activity in the period. Net premiums earned in property and other short-tailed lines were approximately 70% of the total for 2009, compared to 64% in 2008. The 2009 current year loss ratio included 2.0 points of current period catastrophic event activity, compared to 19.6 points for 2008, primarily related to Hurricanes Gustav and Ike.

2008 versus 2007: The reinsurance segment's current year loss ratio was 16.2% higher in 2008 than 2007, primarily due to 19.6 points of catastrophic activity in 2008, compared to 4.3 points in 2007.

Table of Contents

The reinsurance segment's current year loss ratio in 2008 also reflected changes in the mix of business and an increase in expected loss ratios across a number of lines of business primarily due to rate changes.

Prior period reserve development.

2009 prior period reserve development: The reinsurance segment's net favorable development of \$142.1 million, or 12.3 points, consisted of \$81.7 million from short-tailed lines and \$80.4 million came from long-tailed lines, partially offset by \$20.0 million of adverse development on medium-tailed lines. Favorable development in short-tailed lines included \$57.6 million of favorable development from property catastrophe and other property lines. Such amount included reductions in 2005 to 2008 underwriting years of \$9.9 million, \$2.2 million, \$17.8 million and \$25.7 million, respectively. In addition, favorable development in short-tailed lines included \$21.8 million from other specialty business, including \$6.2 million and \$7.5 million from the 2004 and 2005 underwriting years. The reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from a lower level of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during 2009. Net favorable development of \$80.4 million in long-tailed lines included reductions in casualty reserves of \$27.0 million, \$34.6 million and \$17.6 million from the 2004 to 2006 underwriting years which primarily resulted from a lower level of reported and paid claims activity than previously anticipated on U.S. and international excess liability, professional liability and D&O lines. Over time, historical loss information for older underwriting years has been given more weight in the reinsurance segment's reserving process based on the continued maturation of its reserves. Adverse development on medium-tailed lines resulted from increases on marine exposures in the 2008 underwriting year of \$31.8 million, due in part to increases in Hurricane Ike estimates, partially offset by reductions in the 2004 to 2006 underwriting years.

2008 prior period reserve development: The reinsurance segment's net favorable development of \$231.2 million, or 19.8 points, consisted of \$126.1 million from short-tailed lines and \$105.1 million from medium-tailed and long-tailed business. The reinsurance segment's favorable development in short-tailed lines of \$126.1 million included \$73.5 million of favorable development from property catastrophe and other property lines. Of such amount, \$42.0 million of favorable development came from the reinsurance segment's property catastrophe business, including \$10.8 million, \$11.4 million and \$15.7 million from the 2005 to 2007 underwriting years, respectively. The remainder was attributable to favorable development on other property business, primarily from the 2005 underwriting year. In addition, favorable development in short-tailed lines reflected \$46.5 million of favorable development in other specialty business, including \$16.7 million, \$5.1 million and \$9.5 million from the 2005 to 2007 underwriting years, respectively, with the remainder attributable to earlier underwriting years. The reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from a lower level of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during 2008. The net favorable development of \$105.1 million in medium-tailed and long-tailed lines was primarily in casualty reserves from the 2003 to 2005 underwriting years, which contributed \$31.0 million, \$38.7 million and \$14.2 million, respectively. The reductions in casualty reserves primarily resulted from a lower level of reported and paid claims activity than previously anticipated on U.S. and international excess liability, professional liability and D&O lines.

2007 prior period reserve development: The reinsurance segment's net favorable development of \$172.7 million, or 13.9 points, consisted of \$110.6 million from short-tailed lines and \$62.1 million from medium-tailed and long-tailed business. The reinsurance segment's favorable development in short-tailed lines of \$110.6 million included \$66.7 million of favorable development from property catastrophe and other property lines. Of such amount, \$16.6 million and \$44.3 million came from the 2004 and 2006 underwriting years, respectively. In addition, favorable development in short-tailed lines reflected \$47.0 million of favorable development in other specialty business, including \$7.9 million,

Table of Contents

\$11.1 million, \$12.4 million and \$14.4 million from the 2003 to 2006 underwriting years, respectively. The reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from a lower level of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during 2007. The net favorable development of \$62.1 million in medium-tailed and long-tailed lines was primarily in casualty reserves from the 2003 to 2004 underwriting years, which contributed \$17.5 million and \$28.5 million, respectively. The reductions in casualty reserves primarily resulted from a lower level of reported and paid claims activity than previously anticipated on U.S. and international excess liability, professional liability and D&O lines.

Underwriting Expenses

2009 versus 2008: The underwriting expense ratio for the reinsurance segment was 29.1% in 2009, compared to 29.4% in 2008. The acquisition expense ratio for 2009 was 22.1%, compared to 22.7% for 2008. Commission income from the Treaty with Flatiron discussed above (in excess of the reimbursement of direct acquisition expenses) reduced the reinsurance segment's acquisition expense ratio by 0.7 points in 2009, compared to 2.0 points in 2008. In addition, the 2009 acquisition expense ratio reflected 0.3 points related to estimated net favorable development in prior year loss reserves, compared to 1.0 points in 2008. The comparison of the 2009 and 2008 acquisition expense ratios is influenced by, among other things, the mix and type of business written and earned and the level of ceding commission income. The reinsurance segment's other operating expense ratio was 7.0% for 2009, compared to 6.7% for 2008. The higher ratio in 2009 resulted in part from a lower level of net premiums earned and a higher weighted contribution from the reinsurance segment's property facultative operations, which operates at a higher operating expense ratio due to the nature of its business.

2008 versus 2007: The underwriting expense ratio for the reinsurance segment was 29.4% in 2008, compared to 28.9% in 2007. The acquisition expense ratio for 2008 was 22.7%, compared to 22.4% for 2007. Commission income from the Treaty with Flatiron discussed above (in excess of the reimbursement of direct acquisition expenses) reduced the reinsurance segment's acquisition expense ratio by 2.0 points in 2008, compared to 3.1 points in 2007. In addition, the 2008 acquisition expense ratio reflected 1.0 points related to estimated net favorable development in prior year loss reserves, compared to 1.5 points in 2007. The comparison of the 2008 and 2007 acquisition expense ratios is influenced by, among other things, the mix and type of business written and earned and the level of ceding commission income. The reinsurance segment's other operating expense ratio was 6.7% for 2008, compared to 6.5% for 2007. The higher ratio in 2008 primarily resulted from a lower level of net premiums earned.

Net Investment Income

Net investment income was \$390.1 million for 2009, compared to \$468.1 million for 2008 and \$463.2 million for 2007. The pre-tax investment income yield was 3.74% for 2009, compared to 4.73% for 2008 and 4.97% for 2007. These yields were calculated based on amortized cost. Yields on future investment income may vary based on financial market conditions, investment allocation decisions and other factors. The comparability of net investment income between the 2009 and 2008 periods was influenced by our share repurchase program, as well as the decrease in the pre-tax investment income yield, due in part to the prevailing interest rate environment and a reduction of the portfolio's effective duration to 2.87 years at December 31, 2009, compared to 3.62 years at December 31, 2008. The increase in net investment income in 2008 from 2007 primarily resulted from a higher level of average invested assets primarily generated by cash flows from operations, partially offset by share repurchase activity during 2008 and a decrease in the pre-tax investment income yield.

Table of Contents***Equity in Net Income (Loss) of Investment Funds Accounted for Using the Equity Method***

Equity in net income of investment funds accounted for using the equity method was \$167.8 million for 2009, compared to equity in net loss of \$178.6 million for 2008 and equity in net loss of \$0.2 million for 2007. We record such investments on a one month or three month lag. The 2009 and 2008 amounts primarily related to our investments in U.S. and Euro-denominated bank loan funds and was impacted by the use of leverage to achieve a higher rate of return. While leverage presents opportunities for increasing the total return of such investments, it may increase losses as well. Accordingly, any event that adversely affects the value of the underlying securities held by such investments would be magnified to the extent leverage is used and our potential losses from such investments would be magnified. Losses during 2008 resulted from the extreme volatility in the capital and credit markets as the market values of the secured loans underlying the holdings in such funds declined significantly. During 2009, income from investment funds substantially offset the 2008 losses reflecting improving tightening credit spreads and lower volatility in the capital and credit markets.

Net Realized Gains or Losses

Net realized gains (losses) were as follows, excluding other-than-temporary impairment provisions:

	Years Ended December 31,		
	2009	2008	2007
Fixed maturities	\$ 135,426	\$ (17,793)	\$ 66,716
Other investments	5,166	(10,039)	2,939
Other (1)	2,990	23,893	(11,317)
Total	\$ 143,582	\$ (3,939)	\$ 58,338

(1) Primarily consists of net realized gains or losses related to investment-related derivatives, futures contracts, and foreign currency forward contracts.

Currently, our portfolio is actively managed to maximize total return within certain guidelines. In assessing returns under this approach, we include net investment income, net realized gains and losses and the change in unrealized gains and losses generated by our investment portfolio. The effect of financial market movements on the investment portfolio will directly impact net realized gains and losses as the portfolio is adjusted and rebalanced. Total return on our portfolio under management for 2009 was 11.28%, compared to (2.84%) for 2008 and 6.52% for 2007. Excluding foreign exchange, total return was 10.56% for 2009, compared to (2.00%) for 2008 and 5.99% for 2007. Total return is calculated on a pre-tax basis and before investment expenses. The lower total return in 2008 compared to 2007 and 2009 was primarily due to the widening credit spreads which occurred during the last half of 2008, along with the impact of foreign exchange rate changes. For all periods presented, net realized gains or losses from the sale of fixed maturities primarily resulted from our decisions to reduce credit exposure, changes in duration targets, relative value determinations and sales related to rebalancing the portfolio. In addition, net realized gains or losses for 2009 and 2008 include changes in the market value of certain hybrid securities pursuant to applicable guidance. We recorded realized gains of \$14.8 million on such securities in 2009, compared to realized losses of \$5.4 million in 2008.

Net Impairment Losses Recognized in Earnings

We review our investment portfolio each quarter to determine if declines in market value are other-than-temporary. The process for identifying declines in the market value of investments that are other-than-temporary involves consideration of several factors. These factors include (i) an analysis of the liquidity, business prospects and overall financial condition of the issuer, (ii) the time period in which there was a significant decline in value, and (iii) the significance of the decline. For 2009, we

Table of Contents

recorded \$66.1 million of credit related impairments in earnings. The other-than-temporary impairments ("OTTI") recorded in 2009 primarily resulted from reductions in estimated recovery values on certain mortgage-backed and asset-backed securities following the review of such securities. We recorded \$181.2 million and \$30.2 million of OTTI as a charge against earnings in 2008 and 2007, respectively. Such amounts were recorded prior to the adoption of accounting guidance regarding the recognition and presentation of OTTI, and included a portion related to credit losses and a portion related to all other factors. See note 7, "Investment Information Other-Than-Temporary Impairments," of the notes accompanying our consolidated financial statements for additional information.

Other Expenses

Other expenses, which are included in our other operating expenses and part of our corporate and other (non-underwriting) segment, were \$30.2 million for 2009, compared to \$28.5 million for 2008 and \$30.7 million for 2007. Such amounts primarily represent certain holding company costs necessary to support our worldwide insurance and reinsurance operations, share based compensation expense and costs associated with operating as a publicly traded company.

Net Foreign Exchange Gains or Losses

Net foreign exchange losses for 2009 of \$39.2 million consisted of net unrealized losses of \$37.6 million and net realized losses of \$1.6 million. Net foreign exchange gains for 2008 of \$96.6 million consisted of net unrealized gains of \$97.4 million and net realized losses of \$0.8 million. Net foreign exchange losses of \$44.0 million for 2007 consisted of net unrealized losses of \$48.8 million and net realized gains of \$4.8 million. The 2009 and 2007 net foreign exchange losses primarily resulted from the weakening of the U.S. Dollar against the Euro and other major currencies during those periods, while the net foreign exchange gains in 2008 primarily resulted from a strengthening of the U.S. Dollar against the British Pound and Euro during that period. Net unrealized foreign exchange gains or losses result from the effects of revaluing our net insurance liabilities required to be settled in foreign currencies at each balance sheet date. We generally hold investments in foreign currencies which are intended to mitigate our exposure to foreign currency fluctuations in our net insurance liabilities. However, changes in the value of such investments due to foreign currency rate movements are reflected as a direct increase or decrease to shareholders' equity and are not included in the statements of income.

Income Taxes

ACGL changed its legal domicile from the United States to Bermuda in November 2000. Under current Bermuda law, we are not obligated to pay any taxes in Bermuda based upon income or capital gains. We have received a written undertaking from the Minister of Finance in Bermuda under the Exempted Undertakings Tax Protection Act of 1966 that in the event legislation is enacted in Bermuda imposing tax computed on profits, income, gain or appreciation on any capital asset, or tax in the nature of estate duty or inheritance tax, such tax will not be applicable to us or our operations until March 28, 2016.

ACGL will be subject to U.S. federal income tax only to the extent that it derives U.S. source income that is subject to U.S. withholding tax or income that is effectively connected with the conduct of a trade or business within the U.S. and is not exempt from U.S. tax under an applicable income tax treaty. ACGL will be subject to a withholding tax on dividends from U.S. investments and interest from certain U.S. taxpayers. ACGL does not consider itself to be engaged in a trade or business within the U.S. and, consequently, does not expect to be subject to direct U.S. income taxation. However, because there is uncertainty as to the activities which constitute being engaged in a trade or business within the United States, there can be no assurances that the U.S. Internal Revenue Service will not contend

Table of Contents

successfully that ACGL or its non-U.S. subsidiaries are engaged in a trade or business in the United States. If ACGL or any of its non-U.S. subsidiaries were subject to U.S. income tax, ACGL's shareholders' equity and earnings could be materially adversely affected. ACGL has subsidiaries and branches that operate in various jurisdictions around the world that are subject to tax in the jurisdictions in which they operate. The significant jurisdictions in which ACGL's subsidiaries and branches are subject to tax are the United States, United Kingdom, Ireland, Canada, Switzerland and Denmark. See "Risk Factors Risks Relating to Taxation" and "Business Tax Matters."

The income tax provision on income before income taxes resulted in an effective tax rate of 2.3% for 2009, compared to 4.4% for 2008 and 1.8% for 2007. Our effective tax rate fluctuates from year to year consistent with the relative mix of income reported by jurisdiction due primarily to the varying tax rates in each jurisdiction. We currently estimate that our comparable income tax provision in 2010 will result in an effective tax rate of approximately 3% to 5%, although no assurances can be given to that effect. See note 11, "Income Taxes," of the notes accompanying our consolidated financial statements for a reconciliation of the difference between the provision for income taxes and the expected tax provision at the weighted average statutory tax rate for 2009, 2008 and 2007.

CRITICAL ACCOUNTING POLICIES, ESTIMATES AND RECENT ACCOUNTING PRONOUNCEMENTS

The preparation of consolidated financial statements in accordance with GAAP requires us to make many estimates and judgments that affect the reported amounts of assets, liabilities (including reserves), revenues and expenses, and related disclosures of contingent liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, insurance and other reserves, reinsurance recoverables, allowance for doubtful accounts, investment valuations, intangible assets, bad debts, income taxes, contingencies and litigation. We base our estimates on historical experience, where possible, and on various other assumptions that we believe to be reasonable under the circumstances, which form the basis for our judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Estimates and judgments for a relatively new insurance and reinsurance company, like our company, are even more difficult to make than those made in a mature company since relatively limited historical information has been reported to us through December 31, 2009. Actual results will differ from these estimates and such differences may be material. We believe that the following critical accounting policies affect significant estimates used in the preparation of our consolidated financial statements.

Reserves for Losses and Loss Adjustment Expenses

We are required by applicable insurance laws and regulations and GAAP to establish reserves for losses and loss adjustment expenses ("Loss Reserves") that arise from the business we underwrite. Loss Reserves for our insurance and reinsurance operations are balance sheet liabilities representing estimates of future amounts required to pay losses and loss adjustment expenses for insured or reinsured events which have occurred at or before the balance sheet date. Loss Reserves do not reflect contingency reserve allowances to account for future loss occurrences. Losses arising from future events will be estimated and recognized at the time the losses are incurred and could be substantial.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

At December 31, 2009 and 2008, our Loss Reserves, net of unpaid losses and loss adjustment expenses recoverable, by type and by operating segment were as follows:

	December 31,	
	2009	2008
Insurance:		
Case reserves	\$ 1,166,441	\$ 1,043,168
IBNR reserves	2,431,193	2,257,735
Total net reserves	\$ 3,597,634	\$ 3,300,903
 Reinsurance:		
Case reserves	\$ 812,455	\$ 661,621
Additional case reserves	61,226	87,820
IBNR reserves	1,742,597	1,887,478
Total net reserves	\$ 2,616,278	\$ 2,636,919
 Total:		
Case reserves	\$ 1,978,896	\$ 1,704,789
Additional case reserves	61,226	87,820
IBNR reserves	4,173,790	4,145,213
Total net reserves	\$ 6,213,912	\$ 5,937,822

Insurance Operations

Loss Reserves for our insurance operations are comprised of (1) estimated amounts for claims reported ("case reserves") and (2) incurred but not reported ("IBNR") losses. For our insurance operations, generally, claims personnel determine whether to establish a case reserve for the estimated amount of the ultimate settlement of individual claims. The estimate reflects the judgment of claims personnel based on general corporate reserving practices, the experience and knowledge of such personnel regarding the nature and value of the specific type of claim and, where appropriate, advice of counsel. Our insurance operations also contract with a number of outside third party administrators in the claims process who, in certain cases, have limited authority to establish case reserves. The work of such administrators is reviewed and monitored by our claims personnel. Loss Reserves are also established to provide for loss adjustment expenses and represent the estimated expense of settling claims, including legal and other fees and the general expenses of administering the claims adjustment process. Periodically, adjustments to the reported or case reserves may be made as additional information regarding the claims is reported or payments are made. IBNR reserves are established to provide for incurred claims which have not yet been reported to an insurer or reinsurer at the balance sheet date as well as to adjust for any projected variance in case reserving. IBNR reserves are derived by subtracting paid losses and loss adjustment expenses and case reserves from estimates of ultimate losses and loss adjustment expenses. Actuaries estimate ultimate losses and loss adjustment expenses using various generally accepted actuarial methods applied to known losses and other relevant information. Like case reserves, IBNR reserves are adjusted as additional information becomes known or payments are made. The process of estimating reserves involves a considerable degree of judgment by management and, as of any given date, is inherently uncertain.

Ultimate losses and loss adjustment expenses are generally determined by extrapolation of claim emergence and settlement patterns observed in the past that can reasonably be expected to persist into the future. In forecasting ultimate losses and loss adjustment expenses with respect to any line of business, past experience with respect to that line of business is the primary resource, developed through both industry and company experience, but cannot be relied upon in isolation. Uncertainties in

Table of Contents

estimating ultimate losses and loss adjustment expenses are magnified by the time lag between when a claim actually occurs and when it is reported and settled. This time lag is sometimes referred to as the "claim-tail". The claim-tail for most property coverages is typically short (usually several months up to a few years). The claim-tail for certain professional liability, executive assurance and healthcare coverages, which are generally written on a claims-made basis, is typically longer than property coverages but shorter than casualty lines. The claim-tail for liability/casualty coverages, such as general liability, products liability, multiple peril coverage, and workers' compensation, may be especially long as claims are often reported and ultimately paid or settled years, even decades, after the related loss events occur. During the long claims reporting and settlement period, additional facts regarding coverages written in prior accident years, as well as about actual claims and trends, may become known and, as a result, our insurance operations may adjust their reserves. If management determines that an adjustment is appropriate, the adjustment is recorded in the accounting period in which such determination is made in accordance with GAAP. Accordingly, should Loss Reserves need to be increased or decreased in the future from amounts currently established, future results of operations would be negatively or positively impacted, respectively.

In determining ultimate losses and loss adjustment expenses, the cost to indemnify claimants, provide needed legal defense and other services for insureds and administer the investigation and adjustment of claims are considered. These claim costs are influenced by many factors that change over time, such as expanded coverage definitions as a result of new court decisions, inflation in costs to repair or replace damaged property, inflation in the cost of medical services and legislated changes in statutory benefits, as well as by the particular, unique facts that pertain to each claim. As a result, the rate at which claims arose in the past and the costs to settle them may not always be representative of what will occur in the future. The factors influencing changes in claim costs are often difficult to isolate or quantify and developments in paid and incurred losses from historical trends are frequently subject to multiple and conflicting interpretations. Changes in coverage terms or claims handling practices may also cause future experience and/or development patterns to vary from the past. A key objective of actuaries in developing estimates of ultimate losses and loss adjustment expenses, and resulting IBNR reserves, is to identify aberrations and systemic changes occurring within historical experience and accurately adjust for them so that the future can be projected reliably. Because of the factors previously discussed, this process requires the substantial use of informed judgment and is inherently uncertain.

At December 31, 2009 and 2008, Loss Reserves for our insurance operations by major line of business, net of unpaid losses and loss adjustment expenses recoverable, were as follows:

	December 31,	
	2009	2008
Casualty	\$ 641,793	\$ 673,511
Executive assurance	536,151	445,922
Property, energy, marine and aviation	533,859	518,475
Professional liability	504,454	448,769
Programs	452,143	400,245
Construction	421,729	389,931
Healthcare	139,414	148,915
Surety	89,501	79,705
National accounts casualty	96,251	54,974
Travel and accident	29,033	20,638
Other	153,306	119,818
Total net reserves	\$ 3,597,634	\$ 3,300,903

Table of Contents

The initial reserving method for our insurance operations to date has been, to a large extent, the expected loss method, which is commonly applied when limited loss experience exists. Our insurance operations employ a number of different reserving methods depending on the line of business, the availability of historical loss experience and the stability of that loss experience. Over time, such techniques have been given more weight in the reserving process due to the continuing maturation of their Loss Reserves and the increased availability and credibility of the historical experience. Any estimates and assumptions made as part of the reserving process could prove to be inaccurate due to several factors, including the fact that relatively limited historical information has been reported to our insurance operations through December 31, 2009 in some lines of business. See below for a discussion of the key assumptions in our insurance operations' reserving process.

Although Loss Reserves are initially determined based on underwriting and pricing analysis, our insurance operations apply several generally accepted actuarial methods, as discussed below, on a quarterly basis to evaluate their Loss Reserves, in addition to the expected loss method, in particular for Loss Reserves from more mature accident years (the year in which a loss occurred). As noted below, beginning in 2005, our insurance operations began to give a relatively small amount of weight to their own experience following reviews of open claims on lines of business written on a claims-made basis for which they developed a reasonable level of credible data. Each quarter, as part of the reserving process, actuaries at our insurance operations reaffirm that the assumptions used in the reserving process continue to form a sound basis for the projection of liabilities. If actual loss activity differs substantially from expectations based on historical information, an adjustment to loss reserves may be supported. Estimated Loss Reserves for more mature accident years are now based more on historical loss activity and patterns than on the initial assumptions based on pricing indications. More recent accident years rely more heavily on internal pricing assumptions. Our insurance operations place more or less reliance on a particular actuarial method based on the facts and circumstances at the time the estimates of Loss Reserves are made. These methods generally fall into one of the following categories or are hybrids of one or more of the following categories:

Expected loss methods these methods are based on the assumption that ultimate losses vary proportionately with premiums. Expected loss and loss adjustment expense ratios are typically developed based upon the information derived by underwriters and actuaries during the initial pricing of the business, supplemented by industry data available from organizations, such as statistical bureaus and consulting firms, where appropriate. These ratios consider, among other things, rate increases and changes in terms and conditions that have been observed in the market. Expected loss methods are useful for estimating ultimate losses and loss adjustment expenses in the early years of long-tailed lines of business, when little or no paid or incurred loss information is available, and is commonly applied when limited loss experience exists for a company.

Historical incurred loss development methods these methods assume that the ratio of losses in one period to losses in an earlier period will remain constant in the future. These methods use incurred losses (*i.e.*, the sum of cumulative historical loss payments plus outstanding case reserves) over discrete periods of time to estimate future losses. Historical incurred loss development methods may be preferable to historical paid loss development methods because they explicitly take into account open cases and the claims adjusters' evaluations of the cost to settle all known claims. However, historical incurred loss development methods necessarily assume that case reserving practices are consistently applied over time. Therefore, when there have been significant changes in how case reserves are established, using incurred loss data to project ultimate losses may be less reliable than other methods.

Historical paid loss development methods these methods, like historical incurred loss development methods, assume that the ratio of losses in one period to losses in an earlier period will remain constant. These methods use historical loss payments over discrete periods of time to

Table of Contents

estimate future losses and necessarily assume that factors that have affected paid losses in the past, such as inflation or the effects of litigation, will remain constant in the future. Because historical paid loss development methods do not use incurred losses to estimate ultimate losses, they may be more reliable than the other methods that use incurred losses in situations where there are significant changes in how incurred losses are established by a company's claims adjusters. However, historical paid loss development methods are more leveraged (meaning that small changes in payments have a larger impact on estimates of ultimate losses) than actuarial methods that use incurred losses because cumulative loss payments take much longer to equal the expected ultimate losses than cumulative incurred amounts. In addition, and for similar reasons, historical paid loss development methods are often slow to react to situations when new or different factors arise than those that have affected paid losses in the past.

Adjusted historical paid and incurred loss development methods these methods take traditional historical paid and incurred loss development methods and adjust them for the estimated impact of changes from the past in factors such as inflation, the speed of claim payments or the adequacy of case reserves. Adjusted historical paid and incurred loss development methods are often more reliable methods of predicting ultimate losses in periods of significant change, provided the actuaries can develop methods to reasonably quantify the impact of changes. As such, these methods utilize more judgment than historical paid and incurred loss development methods.

Bornhuetter-Ferguson ("B-F") paid and incurred loss methods these methods utilize actual paid and incurred losses and expected patterns of paid and incurred losses, taking the initial expected ultimate losses into account to determine an estimate of expected ultimate losses. The B-F paid and incurred loss methods are useful when there are few reported claims and a relatively less stable pattern of reported losses.

Additional analyses other methodologies are often used in the reserving process for specific types of claims or events, such as catastrophic or other specific major events. These include vendor catastrophe models, which are typically used in the estimation of Loss Reserves at the early stage of known catastrophic events before information has been reported to an insurer or reinsurer, and analyses of specific industry events, such as large lawsuits or claims.

In the initial reserving process for casualty business, primarily consisting of primary and excess exposures written on an occurrence basis, our insurance operations primarily rely on the expected loss method. The development of our insurance operations' casualty business may be unstable due to its long-tail nature and the occurrence of high severity events, as a portion of our insurance operations' casualty business is in high excess layers. As time passes, for a given accident year, additional weight is given to the paid and incurred B-F loss development methods and historical paid and incurred loss development methods in the reserving process. Our insurance operations make a number of key assumptions in reserving for casualty business, including that the pricing loss ratio is the best estimate of the ultimate loss ratio at the time the policy is entered into, that our insurance operations' loss development patterns, which are based on industry loss development patterns and adjusted to reflect differences in our insurance operations' mix of business, are reasonable and that our insurance operations' claims personnel and underwriters analyses of our exposure to major events are assumed to be our best estimate of our exposure to the known claims on those events. As noted earlier, due to the long claims reporting and settlement period for casualty business, additional facts regarding coverages written in prior accident years, as well as about actual claims and trends may become known and, as a result, our insurance operations may be required to adjust their casualty reserves. The expected loss ratios used in the initial reserving process for our insurance operations' casualty business for recent accident years have varied, in some cases significantly, from earlier accident years. As the credibility of historical experience for earlier accident years increases, the experience from these accident years will

Table of Contents

be given a greater weighting in the actuarial analysis to determine future accident year expected loss ratios, adjusted for changes in pricing, loss trends, terms and conditions and reinsurance structure.

In the initial reserving process for property, energy, marine and aviation business, which are primarily short-tail exposures, our insurance operations rely on a combination of the reserving methods discussed above. For catastrophe-exposed business, our insurance operations' reserving process also includes the usage of catastrophe models for known events and a heavy reliance on analysis of individual catastrophic events and management judgment. The development of property losses can be unstable, especially for policies characterized by high severity, low frequency losses. As time passes, for a given accident year, additional weight is given to the paid and incurred B-F loss development methods and historical paid and incurred loss development methods in the reserving process. Our insurance operations make a number of key assumptions in their reserving process, including that historical paid and reported development patterns are stable, catastrophe models provide useful information about our exposure to catastrophic events that have occurred and our underwriters' judgment as to potential loss exposures can be relied on. The expected loss ratios used in the initial reserving process for our insurance operations' property business have varied over time due to changes in pricing, reinsurance structure, estimates of catastrophe losses, policy changes (such as attachment points, class and limits) and geographical distribution. As losses in property lines are reported relatively quickly, expected loss ratios are selected for the current accident year based upon actual attritional loss ratios for earlier accident years, adjusted for rate changes, inflation, changes in reinsurance programs and expected attritional losses based on modeling. Due to the short-tail nature of property business, reported loss experience emerges quickly and ultimate losses are known in a reasonably short period of time.

In addition to the assumptions and development characteristics noted above for casualty and property business, our insurance operations authorize managing general agents, general agents and other producers to write program business on their behalf within prescribed underwriting authorities. This adds additional complexity to the reserving process. To monitor adherence to the underwriting guidelines given to such parties, our insurance operations periodically perform claims due diligence reviews. In the initial reserving process for program business, consisting of property and liability exposures which are primarily written on an occurrence basis, our insurance operations primarily rely on the expected loss method. As time passes, for a given accident year, additional weight is given to the paid and incurred B-F loss development methods and historical paid and incurred loss development methods in the reserving process. The expected loss ratios used in the initial reserving process for our insurance operations' program business have varied over time depending on the type of exposures written (casualty or property) and changes in pricing, loss trends, reinsurance structure and changes in the underlying business.

In the initial reserving process for executive assurance, professional liability and healthcare business, primarily consisting of medium-tail exposures written on a claims-made basis, our insurance operations primarily rely on the expected loss method. As time passes, for a given accident year, additional weight is given to the paid and incurred B-F loss development methods and historical paid and incurred loss development methods in the reserving process. Beginning in 2005, our insurance operations began to give a relatively small amount of weight to their own experience following reviews of open claims, in particular for lines of business written on a claims-made basis for which they developed a reasonable level of credible data. Over the last few years, our insurance operations have increased their reliance on reviews of open claims. In general, the expected loss ratios established for executive assurance, professional liability and healthcare business for recent accident years vary, in some cases materially, from earlier accident years based on analysis of pricing, loss cost trends and changes in policy coverage. Since this business is primarily written on a claims-made basis and is subject to high severity, low frequency losses, a great deal of uncertainty exists in setting these initial reserves. In addition, only a limited number of years of historical experience is available for use in projecting

Table of Contents

loss experience using standard actuarial methods. As the credibility of historical experience for earlier accident years increases, the experience from these accident years will be given a greater weighting in the actuarial analysis to determine future accident year expected loss ratios, adjusted for the occurrence or lack of large losses, changes in pricing, loss trends, terms and conditions and reinsurance structure.

In the initial reserving process for construction and surety business, consisting of primary and excess casualty and contract surety coverages written on an occurrence and claims-made basis, our insurance operations primarily rely on a combination of the reserving methods discussed above. Such business is subject to the assumptions and development characteristics noted above for casualty business. As time passes, for a given accident year, additional weight has been given to the paid and incurred B-F loss development methods and historical paid and incurred loss development methods in the reserving process. In general, the expected loss ratios used in the initial reserving process for our insurance operations' construction and surety business for recent accident years vary, in some cases materially, from earlier accident years. As the credibility of historical experience for earlier accident years has increased, the experience from these accident years has been given a greater weighting in the actuarial analysis to determine future accident year expected loss ratios, adjusted for anticipated changes in the regulatory environment, pricing, loss trends, terms and conditions and reinsurance structure.

For the years ended December 31, 2007 to 2009, on average, our insurance segment reported approximately \$46 million of estimated net favorable development in prior year Loss Reserves, or approximately 1.6% of average beginning Loss Reserves. Of such amount, approximately \$38 million came from medium-tail lines, or 3.1% of beginning medium-tail Loss Reserves and \$11 million from long-tail lines, or 1.0% of average beginning long-tail Loss Reserves, offset partially by adverse development of \$3 million from short-tail lines, or 0.5% of average beginning short-tail Loss Reserves. For the year ended December 31, 2009, estimated net favorable development in prior year Loss Reserves was approximately \$47 million, or 1.4% of beginning Loss Reserves. Such amount consisted of approximately \$40 million from medium-tail lines, or 2.9% of beginning medium-tail Loss Reserves, and \$22 million from short-tail lines, or 3.3% of beginning short-tail Loss Reserves, partially offset by adverse development of \$15 million from long-tail lines, or 1.2% of beginning long-tail Loss Reserves. For informational purposes, based on historical results, applying the 1.6% average estimated net favorable development in average beginning Loss Reserves for the years ended December 31, 2007 to 2009 to our insurance segment's net Loss Reserves of \$3.6 billion at December 31, 2009 would result in an increase in income before income taxes of approximately \$58 million, or \$0.93 per diluted share, and applying the 1.4% of estimated net favorable development in beginning Loss Reserves for the year ended December 31, 2009 to such Loss Reserves would result in an increase in income before income taxes of approximately \$51 million, or \$0.83 per diluted share. The amounts noted above are informational only and should not be considered projections of future events. Future favorable or adverse development in our insurance segment's Loss Reserves is subject to numerous factors, and no assurances can be given that we will experience favorable development in our Loss Reserves or that our ultimate losses will not be significantly different than the amounts shown above, and such differences could directly and significantly impact earnings favorably or unfavorably in the period they are determined. Because of our insurance segment's limited operating history, the sensitivity analysis above is one way to gauge the impact of changes in the assumptions in our reserving process. For another estimate of potential variability in our insurance segment's Loss Reserves, see " Simulation Results." Refer to " Results of Operations" for a discussion on net favorable or adverse development of our insurance operations' prior year Loss Reserves.

Reinsurance Operations

Loss Reserves for our reinsurance operations are comprised of (1) case reserves for claims reported, (2) additional case reserves ("ACRs") and (3) IBNR reserves. Our reinsurance operations

Table of Contents

receive reports of claims notices from ceding companies and record case reserves based upon the amount of reserves recommended by the ceding company. Case reserves on known events may be supplemented by ACRs, which are often estimated by our reinsurance operations' claims personnel ahead of official notification from the ceding company, or when our reinsurance operations' judgment regarding the size or severity of the known event differs from the ceding company. In certain instances, our reinsurance operations establish ACRs even when the ceding company does not report any liability on a known event. In addition, specific claim information reported by ceding companies or obtained through claim audits can alert our reinsurance operations to emerging trends such as changing legal interpretations of coverage and liability, claims from unexpected sources or classes of business, and significant changes in the frequency or severity of individual claims. Such information is often used in the process of estimating IBNR reserves.

The estimation of Loss Reserves for our reinsurance operations is subject to the same risk factors as the estimation of Loss Reserves for our insurance operations. In addition, the inherent uncertainties of estimating such reserves are even greater for reinsurers, due primarily to the following factors: (1) the claim-tail for reinsurers is generally longer because claims are first reported to the ceding company and then to the reinsurer through one or more intermediaries, (2) the reliance on premium estimates, where reports have not been received from the ceding company, in the reserving process, (3) the potential for writing a number of reinsurance contracts with different ceding companies with the same exposure to a single loss event, (4) the diversity of loss development patterns among different types of reinsurance treaties or facultative contracts, (5) the necessary reliance on the ceding companies for information regarding reported claims and (6) the differing reserving practices among ceding companies.

As with our insurance operations, the process of estimating Loss Reserves for our reinsurance operations involves a considerable degree of judgment by management and, as of any given date, is inherently uncertain. As discussed above, such uncertainty is greater for reinsurers compared to insurers. As a result, our reinsurance operations obtain information from numerous sources to assist in the process. Pricing actuaries from our reinsurance operations devote considerable effort to understanding and analyzing a ceding company's operations and loss history during the underwriting of the business, using a combination of ceding company and industry statistics. Such statistics normally include historical premium and loss data by class of business, individual claim information for larger claims, distributions of insurance limits provided, loss reporting and payment patterns, and rate change history. This analysis is used to project expected loss ratios for each treaty during the upcoming contract period.

As mentioned above, there can be a considerable time lag from the time a claim is reported to a ceding company to the time it is reported to the reinsurer. The lag can be several years in some cases and may be attributed to a number of reasons, including the time it takes to investigate a claim, delays associated with the litigation process, the deterioration in a claimant's physical condition many years after an accident occurs, the case reserving approach of the ceding company, etc. In the reserving process, our reinsurance operations assume that such lags are predictable, on average, over time and therefore the lags are contemplated in the loss reporting patterns used in their actuarial methods. This means that our reinsurance operations must rely on estimates for a longer period of time than does an insurance company.

Backlogs in the recording of assumed reinsurance can also complicate the accuracy of loss reserve estimation. As of December 31, 2009, there were no significant backlogs related to the processing of assumed reinsurance information at our reinsurance operations.

Our reinsurance operations rely heavily on information reported by ceding companies, as discussed above. In order to determine the accuracy and completeness of such information, underwriters, actuaries, and claims personnel at our reinsurance operations often perform audits of ceding companies

Table of Contents

and regularly review information received from ceding companies for unusual or unexpected results. Material findings are usually discussed with the ceding companies. Our reinsurance operations sometimes encounter situations where they determine that a claim presentation from a ceding company is not in accordance with contract terms. In these situations, our reinsurance operations attempt to resolve the dispute with the ceding company. Most situations are resolved amicably and without the need for litigation or arbitration. However, in the infrequent situations where a resolution is not possible, our reinsurance operations will vigorously defend their position in such disputes.

At December 31, 2009 and 2008, Loss Reserves for our reinsurance operations by major line of business, net of unpaid losses and loss adjustment expenses recoverable, were as follows:

	December 31,	
	2009	2008
Casualty	\$ 1,792,750	\$ 1,739,394
Property excluding property catastrophe	322,476	299,811
Marine and aviation	228,708	238,959
Other specialty	116,799	163,099
Property catastrophe	111,784	145,211
Other	43,761	50,445
Total net reserves	\$ 2,616,278	\$ 2,636,919

The reserving method for our reinsurance operations to date has been, to a large extent, the expected loss method, which is commonly applied when limited loss experience exists. Over time, other common reserving methodologies have begun to be employed. Any estimates and assumptions made as part of the reserving process could prove to be inaccurate due to several factors, including the fact that relatively limited historical information has been reported to our reinsurance operations through December 31, 2009 in some lines of business. See below for a discussion of the key assumptions in our reinsurance operations' reserving process.

Although Loss Reserves are initially determined based on underwriting and pricing analysis, our reinsurance operations apply several generally accepted actuarial methods, as discussed above, on a quarterly basis to evaluate their Loss Reserves in addition to the expected loss method, in particular for Loss Reserves from more mature underwriting years (the year in which business is underwritten). Each quarter, as part of the reserving process, actuaries at our reinsurance operations reaffirm that the assumptions used in the reserving process continue to form a sound basis for projection of liabilities. If actual loss activity differs substantially from expectations based on historical information, an adjustment to loss reserves may be supported. Estimated Loss Reserves for more mature underwriting years are now based more on actual loss activity and historical patterns than on the initial assumptions based on pricing indications. More recent underwriting years rely more heavily on internal pricing assumptions. Our reinsurance operations place more or less reliance on a particular actuarial method based on the facts and circumstances at the time the estimates of Loss Reserves are made.

Table of Contents

In the initial reserving process for medium-tail and long-tail lines, consisting of casualty, other specialty, marine and aviation and other exposures, our reinsurance operations primarily rely on the expected loss method. The development of medium-tail and long-tail business may be unstable, especially if there are high severity major events, with business written on an excess of loss basis typically having a longer tail than business written on a pro rata basis. As time passes, for a given underwriting year, additional weight is given to the paid and incurred B-F loss development methods and historical paid and incurred loss development methods in the reserving process. Our reinsurance operations make a number of key assumptions in reserving for medium-tail and long-tail lines, including that the pricing loss ratio is the best estimate of the ultimate loss ratio at the time the contract is entered into, historical paid and reported development patterns are stable and our reinsurance operations' claims personnel and underwriters analyses of our exposure to major events are assumed to be our best estimate of our exposure to the known claims on those events. The expected loss ratios used in our reinsurance operations' initial reserving process for medium-tail and long-tail contracts have varied over time due to changes in pricing, terms and conditions and reinsurance structure. As the credibility of historical experience for earlier underwriting years increases, the experience from these underwriting years will be used in the actuarial analysis to determine future underwriting year expected loss ratios, adjusted for changes in pricing, loss trends, terms and conditions and reinsurance structure.

The process of estimating Loss Reserves for our reinsurance operations involves a considerable degree of judgment by management and, as of any given date, is inherently uncertain. The inherent uncertainties of estimating such reserves are even greater for reinsurers than for insurers due to the longer claim-tail for reinsurers, the reliance on premium estimates in the reserving process, the diversity and instability of loss development patterns, the necessary reliance on the ceding companies for information regarding reported claims and the differing reserving practices among ceding companies.

In the initial reserving process for short-tail lines, consisting of property excluding property catastrophe and property catastrophe exposures, our reinsurance operations rely on a combination of the reserving methods discussed above. For known catastrophic events, our reinsurance operations' reserving process also includes the usage of catastrophe models and a heavy reliance on analysis which includes ceding company inquiries and management judgment. The development of property losses may be unstable, especially where there is high catastrophic exposure, may be characterized by high severity, low frequency losses for excess and catastrophe-exposed business and may be highly correlated across contracts. As time passes, for a given underwriting year, additional weight is given to the paid and incurred B-F loss development methods and historical paid and incurred loss development methods in the reserving process. Our reinsurance operations make a number of key assumptions in reserving for short-tail lines, including that historical paid and reported development patterns are stable, catastrophe models provide useful information about our exposure to catastrophic events that have occurred and our underwriters' judgment and guidance received from ceding companies as to potential loss exposures may be relied on. The expected loss ratios used in the initial reserving process for our reinsurance operations' property exposures have varied over time due to changes in pricing, reinsurance structure, estimates of catastrophe losses, terms and conditions and geographical distribution. As losses in property lines are reported relatively quickly, expected loss ratios are selected for the current underwriting year incorporating the experience for earlier underwriting years, adjusted for rate changes, inflation, changes in reinsurance programs, expectations about present and future market conditions and expected attritional losses based on modeling. Due to the short-tail nature of property business, reported loss experience emerges quickly and ultimate losses are known in a reasonably short period of time.

For the years ended December 31, 2007 to 2009, on average, our reinsurance segment reported approximately \$182 million of estimated net favorable development in prior year Loss Reserves, or 7.1% of average beginning Loss Reserves. Of such amount, approximately \$106 million came from short-tail lines, or 16% of average beginning short-tail Loss Reserves, \$75 million came from long-tail

Table of Contents

lines, or 4.4% of average beginning long-tail Loss Reserves and \$1 million came from medium-tail lines, or 0.5% of average beginning medium-tail Loss Reserves. For the year ended December 31, 2009, estimated net favorable development in prior year Loss Reserves was \$142 million, or 5.4% of beginning Loss Reserves. Of such amount, approximately \$82 million came from short-tail lines, or 13.2% of beginning short-tail Loss Reserves and \$80 million came from long-tail lines, or 4.5% of beginning long-tail Loss Reserves, partially offset by adverse development of \$20 million from medium-tail lines, or 8.3% of average beginning medium-tail Loss Reserves. For informational purposes, based on our reinsurance segment's historical results, applying the 7.1% average estimated net favorable development in average beginning Loss Reserves for the years ended December 31, 2007 to 2009 to our reinsurance segment's net Loss Reserves of \$2.62 billion at December 31, 2009 would result in an increase in income before income taxes of approximately \$185 million, or \$2.99 per diluted share, while using the 5.4% of estimated net favorable development in beginning Loss Reserves for the year ended December 31, 2009 to such Loss Reserves would result in an increase in income before income taxes of approximately \$141 million, or \$2.28 per diluted share. The amounts noted above are informational only and should not be considered projections of future events. Future favorable or adverse development in our reinsurance segment's Loss Reserves is subject to numerous factors, and no assurances can be given that we will experience favorable development in our Loss Reserves or that our ultimate losses will not be significantly different than the amounts shown above, and such differences could directly and significantly impact earnings favorably or unfavorably in the period they are determined. Because of our reinsurance segment's limited operating history, the sensitivity analysis above is one way to gauge the impact of changes in the assumptions in our reserving process. For another estimate of potential variability in our reinsurance segment's Loss Reserves, see " Simulation Results." Refer to " Results of Operations" for additional discussion on net favorable or adverse development of our reinsurance operations' prior year Loss Reserves.

Simulation Results

Generally, due to the insufficient amount of historical loss data for our insurance and reinsurance operations in many lines of business, we do not produce a range of estimates in calculating reserves. As described above, we primarily use the expected loss method to calculate our initial Loss Reserves, and such amounts represent management's best estimate of our ultimate liabilities. As the loss data has developed, other actuarial methods have been given more weight in our reserving process for certain lines of business. In order to illustrate the potential volatility in our Loss Reserves, we used a Monte Carlo simulation approach to simulate a range of results based on various probabilities. Both the probabilities and related modeling are subject to inherent uncertainties. The simulation relies on a significant number of assumptions, such as the potential for multiple entities to react similarly to external events, and includes other statistical assumptions.

At December 31, 2009, our recorded Loss Reserves by operating segment, net of unpaid losses and loss adjustment expenses recoverable and the results of the simulation were as follows:

	December 31, 2009		
	Insurance	Reinsurance	Total
Total net reserves	\$ 3,597,634	\$ 2,616,278	\$ 6,213,912
Simulation results:			
90th percentile (1)	\$ 4,311,469	\$ 3,419,280	\$ 7,431,838
10th percentile (2)	\$ 2,939,262	\$ 1,921,422	\$ 5,100,210

- (1) Simulation results indicate that a 90% probability exists that the net reserves for losses and loss adjustment expenses will not exceed the indicated amount.
- (2) Simulation results indicate that a 10% probability exists that the net reserves for losses and loss adjustment expenses will be at or below the indicated amount.

Table of Contents

The simulation results shown for each segment do not add to the total simulation results, as the individual segment simulation results do not reflect the diversification effects across our segments. For informational purposes, based on the total simulation results, a change in our Loss Reserves to the amount indicated at the 90th percentile would result in a decrease in income before income taxes of approximately \$1.22 billion, or \$19.67 per diluted share, while a change in our Loss Reserves to the amount indicated at the 10th percentile would result in an increase in income before income taxes of approximately \$1.11 billion, or \$17.98 per diluted share. The simulation results noted above are informational only, and no assurance can be given that our ultimate losses will not be significantly different than the simulation results shown above, and such differences could directly and significantly impact earnings favorably or unfavorably in the period they are determined.

We do not have significant exposure to pre-2002 liabilities, such as asbestos-related illnesses and other long-tail liabilities and, to date, we have experienced a relatively low level of reported claims activity in many lines of business, particularly in longer-tailed lines such as primary and excess casualty and executive assurance, which have longer time periods during which claims are reported and paid. Our limited history does not provide meaningful trend information for such lines of business.

Ceded Reinsurance

In the normal course of business, our insurance operations cede a portion of their premium through pro rata, excess of loss and facultative reinsurance agreements. Our reinsurance operations also obtain reinsurance whereby another reinsurer contractually agrees to indemnify it for all or a portion of the reinsurance risks underwritten by our reinsurance operations. Such arrangements, where one reinsurer provides reinsurance to another reinsurer, are usually referred to as "retrocessional reinsurance" arrangements. In addition, our reinsurance subsidiaries participate in "common account" retrocessional arrangements for certain pro rata treaties. Such arrangements reduce the effect of individual or aggregate losses to all companies participating on such treaties, including the reinsurers, such as our reinsurance operations, and the ceding company. Reinsurance recoverables are recorded as assets, predicated on the reinsurers' ability to meet their obligations under the reinsurance agreements. If the reinsurers are unable to satisfy their obligations under the agreements, our insurance or reinsurance operations would be liable for such defaulted amounts.

The availability and cost of reinsurance and retrocessional protection is subject to market conditions, which are beyond our control. Although we believe that our insurance and reinsurance operations have been successful in obtaining reinsurance and retrocessional protection, it is not certain that they will be able to continue to obtain adequate protection at cost effective levels. As a result of such market conditions and other factors, our insurance and reinsurance operations may not be able to successfully mitigate risk through reinsurance and retrocessional arrangements and may lead to increased volatility in our results of operations in future periods. See "Risk Factors Risks Relating to Our Industry The failure of any of the loss limitation methods we employ could have a material adverse effect on our financial condition or results of operations."

Our insurance operations had in effect during 2009 a reinsurance program which provided coverage equal to a maximum of 80% of the first \$275 million in excess of a \$75 million retention per occurrence for certain property catastrophe-related losses occurring during 2009. During 2008, a reinsurance program was in effect which provided coverage equal to a maximum of 70% of the first \$275 million in excess of a \$75 million retention per occurrence for certain property catastrophe-related losses occurring during 2008, compared to a maximum of 88% of the first \$325 million in excess of a \$75 million retention per occurrence during 2007. In the 2010 first quarter, our insurance operations renewed its reinsurance program which provides coverage for certain property-catastrophe related losses occurring during 2010 equal to a maximum of 77% of the first \$275 million in excess of a \$75 million retention per occurrence.

Table of Contents

For purposes of managing risk, we reinsure a portion of our exposures, paying to reinsurers a part of the premiums received on the policies we write, and we may also use retrocessional protection. Ceded premiums written represented approximately 23.1% of gross premiums written for 2009, compared to 23.5% for 2008 and 29.9% for 2007. We monitor the financial condition of our reinsurers and attempt to place coverages only with substantial, financially sound carriers. If the financial condition of our reinsurers or retrocessionaires deteriorates, resulting in an impairment of their ability to make payments, we will provide for probable losses resulting from our inability to collect amounts due from such parties, as appropriate. We evaluate the credit worthiness of all the reinsurers to which we cede business. If our analysis indicates that there is significant uncertainty regarding the collectability of amounts due from reinsurers, managing general agents, brokers and other clients, we will record a provision for doubtful accounts. See "Financial Condition, Liquidity and Capital Resources Financial Condition Premiums Receivable and Reinsurance Recoverables" for further details.

Premium Revenues and Related Expenses

Insurance premiums written are generally recorded at the policy inception and are primarily earned on a pro rata basis over the terms of the policies for all products, usually 12 months. Premiums written include estimates in our insurance operations' programs, specialty lines, collateral protection business and for participation in involuntary pools. The amount of such insurance premium estimates included in premiums receivable and other assets at December 31, 2009 and 2008 was \$49.2 million and \$52.0 million, respectively. Such premium estimates are derived from multiple sources which include the historical experience of the underlying business, similar business and available industry information. Unearned premium reserves represent the portion of premiums written that relates to the unexpired terms of in-force insurance policies.

Reinsurance premiums written include amounts reported by brokers and ceding companies, supplemented by our own estimates of premiums where reports have not been received. The determination of premium estimates requires a review of our experience with the ceding companies, familiarity with each market, the timing of the reported information, an analysis and understanding of the characteristics of each line of business, and management's judgment of the impact of various factors, including premium or loss trends, on the volume of business written and ceded to us. On an ongoing basis, our underwriters review the amounts reported by these third parties for reasonableness based on their experience and knowledge of the subject class of business, taking into account our historical experience with the brokers or ceding companies. In addition, reinsurance contracts under which we assume business generally contain specific provisions which allow us to perform audits of the ceding company to ensure compliance with the terms and conditions of the contract, including accurate and timely reporting of information. Based on a review of all available information, management establishes premium estimates where reports have not been received. Premium estimates are updated when new information is received and differences between such estimates and actual amounts are recorded in the period in which estimates are changed or the actual amounts are determined. Premiums written are recorded based on the type of contracts we write. Premiums on our excess of loss and pro rata reinsurance contracts are estimated when the business is underwritten. For excess of loss contracts, the minimum premium, as defined in the contract, is generally recorded as an estimate of premiums written as of the inception date of the treaty. Estimates of premiums written under pro rata contracts are recorded in the period in which the underlying risks incept and are based on information provided by the brokers and the ceding companies. For multi-year reinsurance treaties which are payable in annual installments, generally, only the initial annual installment is included as premiums written at policy inception due to the ability of the reinsured to commute or cancel coverage during the term of the policy. The remaining annual installments are included as premiums written at each successive anniversary date within the multi-year term.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

Reinstatement premiums for our insurance and reinsurance operations are recognized at the time a loss event occurs, where coverage limits for the remaining life of the contract are reinstated under pre-defined contract terms. Reinstatement premiums, if obligatory, are fully earned when recognized. The accrual of reinstatement premiums is based on an estimate of losses and loss adjustment expenses, which reflects management's judgment, as described above in "Reserves for Losses and Loss Adjustment Expenses."

The amount of reinsurance premium estimates included in premiums receivable and the amount of related acquisition expenses by type of business were as follows at December 31, 2009 and 2008:

	December 31,					
	2009	2009	Net	2008	2008	Net
	Gross Amount	Acquisition Expenses	Amount	Gross Amount	Acquisition Expenses	Amount
Casualty	\$ 97,341	\$ (23,465)	\$ 73,876	\$ 110,458	\$ (26,866)	\$ 83,592
Property excluding property catastrophe	55,086	(14,611)	40,475	55,104	(14,056)	41,048
Marine and aviation	34,866	(8,738)	26,128	49,776	(13,200)	36,576
Other specialty	18,971	(4,549)	14,422	49,754	(14,648)	35,106
Property catastrophe	1,207	(95)	1,112	28,822	(4,947)	23,875
Other	150	(8)	142	1,110	(59)	1,051
Total	\$ 207,621	\$ (51,466)	\$ 156,155	\$ 295,024	\$ (73,776)	\$ 221,248

Premium estimates are reviewed by management at least quarterly. Such review includes a comparison of actual reported premiums to expected ultimate premiums along with a review of the aging and collection of premium estimates. Based on management's review, the appropriateness of the premium estimates is evaluated, and any adjustment to these estimates is recorded in the period in which it becomes known. Adjustments to premium estimates could be material and such adjustments could directly and significantly impact earnings favorably or unfavorably in the period they are determined because the estimated premium may be fully or substantially earned.

A significant portion of amounts included as premiums receivable, which represent estimated premiums written, net of commissions, are not currently due based on the terms of the underlying contracts. Based on currently available information, management believes that the premium estimates included in premiums receivable will be collectible and, therefore, no provision for doubtful accounts has been recorded on the premium estimates at December 31, 2009.

Reinsurance premiums assumed, irrespective of the class of business, are generally earned on a pro rata basis over the terms of the underlying policies or reinsurance contracts. Contracts and policies written on a "losses occurring" basis cover claims that may occur during the term of the contract or policy, which is typically 12 months. Accordingly, the premium is earned evenly over the term. Contracts which are written on a "risks attaching" basis cover claims which attach to the underlying insurance policies written during the terms of such contracts. Premiums earned on such contracts usually extend beyond the original term of the reinsurance contract, typically resulting in recognition of premiums earned over a 24-month period.

Certain of our reinsurance contracts include provisions that adjust premiums or acquisition expenses based upon the experience under the contracts. Premiums written and earned, as well as related acquisition expenses, are recorded based upon the projected experience under such contracts.

Retroactive reinsurance reimburses a ceding company for liabilities incurred as a result of past insurable events covered by the underlying policies reinsured. In certain instances, reinsurance contracts cover losses both on a prospective basis and on a retroactive basis and, accordingly, we bifurcate the prospective and retrospective elements of these reinsurance contracts and account for each element

Table of Contents

separately. Underwriting income generated in connection with retroactive reinsurance contracts is deferred and amortized into income over the settlement period while losses are charged to income immediately. Subsequent changes in estimated or actual cash flows under such retroactive reinsurance contracts are accounted for by adjusting the previously deferred amount to the balance that would have existed had the revised estimate been available at the inception of the reinsurance transaction, with a corresponding charge or credit to income.

Acquisition expenses and other expenses that vary with, and are directly related to, the acquisition of business in our underwriting operations are deferred and amortized over the period in which the related premiums are earned. Acquisition expenses, net of ceding commissions received from unaffiliated reinsurers, consist primarily of commissions, brokerage and taxes paid to obtain our business. Other operating expenses also include expenses that vary with, and are directly related to, the acquisition of business. Deferred acquisition costs, which are based on the related unearned premiums, are carried at their estimated realizable value and take into account anticipated losses and loss adjustment expenses, based on historical and current experience, and anticipated investment income.

Fair Value Measurements

Accounting guidance regarding fair value measurements addresses how companies should measure fair value when they are required to use a fair value measure for recognition or disclosure purposes under GAAP and provides a common definition of fair value to be used throughout GAAP. It defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly fashion between market participants at the measurement date. In addition, it establishes a three-level valuation hierarchy for the disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The level in the hierarchy within which a given fair value measurement falls is determined based on the lowest level input that is significant to the measurement (Level 1 being the highest priority and Level 3 being the lowest priority).

We determine the existence of an active market based on our judgment as to whether transactions for the financial instrument occur in such market with sufficient frequency and volume to provide reliable pricing information. The independent pricing sources obtain market quotations and actual transaction prices for securities that have quoted prices in active markets. We use quoted values and other data provided by nationally recognized independent pricing sources as inputs into our process for determining fair values of our fixed maturity investments. To validate the techniques or models used by pricing sources, our review process includes, but is not limited to: (i) quantitative analysis (*e.g.*, comparing the quarterly return for each managed portfolio to their target benchmark, with significant differences identified and investigated); (ii) a review of the average number of prices obtained in the pricing process and the range of resulting market values; (iii) initial and ongoing evaluation of methodologies used by outside parties to calculate fair value including a review of deep dive reports on selected securities which indicated the use of observable inputs in the pricing process; (iv) comparing the fair value estimates to our knowledge of the current market; (v) a comparison of the pricing services' fair values to other pricing services' fair values for the same investments; and (vi) back-testing, which includes randomly selecting purchased or sold securities and comparing the executed prices to the fair value estimates from the pricing service. At December 31, 2009 and 2008, we obtained an average of 2.6 quotes per investment. Where multiple quotes or prices were obtained, a price source hierarchy was maintained in order to determine which price source provided the fair value (*i.e.*, a price obtained from a pricing service with more seniority in the hierarchy will be used from a less senior one in all cases). The hierarchy prioritizes pricing services based on availability and reliability and assigns the highest priority to index providers. Based on the above review, we will challenge any prices for a security or portfolio which are considered not to be representative of fair value.

The independent pricing sources obtain market quotations and actual transaction prices for securities that have quoted prices in active markets. Each source has its own proprietary method for

Table of Contents

determining the fair value of securities that are not actively traded. In general, these methods involve the use of "matrix pricing" in which the independent pricing source uses observable market inputs including, but not limited to, investment yields, credit risks and spreads, benchmarking of like securities, broker-dealer quotes, reported trades and sector groupings to determine a reasonable fair market value. In addition, pricing vendors use model processes, such as an Option Adjusted Spread model, to develop prepayment and interest rate scenarios. The Option Adjusted Spread model is commonly used to estimate fair value for securities such as mortgage backed and asset backed securities. In certain circumstances, when fair market values are unavailable from these independent pricing sources, quotes are obtained directly from broker-dealers who are active in the corresponding markets. Such quotes are subject to the validation procedures noted above. Of the \$10.74 billion of financial assets and liabilities measured at fair value, approximately \$1.17 billion, or 10.8%, were priced using non-binding broker-dealer quotes.

In April 2009, the FASB issued guidance regarding the determination of fair value when the volume and level of activity for the asset or liability have significantly decreased and the identification of transactions that are not orderly. This affirms that the objective of fair value when the market for an asset is not active is the price that would be received to sell the asset in an orderly transaction, and clarifies and includes additional factors for determining whether there has been a significant decrease in market activity for an asset when the market for that asset is not active. Under this guidance, if an entity determines that there has been a significant decrease in the volume and level of activity for the asset or the liability in relation to the normal market activity for the asset or liability (or similar assets or liabilities), then transactions or quoted prices may not accurately reflect fair value. In addition, if there is evidence that the transaction for the asset or liability is not orderly, the entity shall place little, if any weight on that transaction price as an indicator of fair value. This guidance also expanded certain disclosure requirements. This guidance was effective for periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. We elected to adopt this pronouncement effective for the interim period ending March 31, 2009, and its adoption did not have a material impact on our consolidated financial condition or results of operations.

We review our securities measured at fair value and discuss the proper classification of such investments with investment advisors and others. See note 8, "Fair Value," of the notes accompanying our consolidated financial statements for a summary of our financial assets and liabilities measured at fair value at December 31, 2009 by valuation hierarchy.

Other-Than-Temporary Impairments ("OTTI")

In April 2009, the FASB issued guidance regarding the recognition and presentation of other-than-temporary impairments, which requires entities to separate an OTTI of a debt security into two components when there are credit related losses associated with the impaired debt security for which an entity asserts that it does not have the intent to sell the security, and it is more likely than not that it will not be required to sell the security before recovery of its cost basis. Prior to January 1, 2009, we had to determine whether we had the intent and ability to hold the investment for a sufficient period of time for the value to recover. Our process for identifying declines in the market value of investments that were considered other-than-temporary involved consideration of several factors. These factors included (i) an analysis of the liquidity, business prospects and overall financial condition of the issuer, (ii) the time period in which there was a significant decline in value, and (iii) the significance of the decline. When the analysis of such factors resulted in our conclusion that declines in market values were other-than-temporary, the cost of the securities was written down to market value and the reduction in value was reflected as a realized loss. Effective under this guidance, the amount of the OTTI related to a credit loss is recognized in earnings, and the amount of the OTTI related to other factors (*e.g.*, interest rates, market conditions, etc.) is recorded as a component of other comprehensive income (loss). In instances where no credit loss exists but it is more likely than not that we will have to sell the debt security prior to the anticipated recovery, the decline in market value below amortized

Table of Contents

cost is recognized as an OTTI in earnings. In periods after the recognition of an OTTI on debt securities, we account for such securities as if they had been purchased on the measurement date of the OTTI at an amortized cost basis equal to the previous amortized cost basis less the OTTI recognized in earnings. For debt securities for which OTTI were recognized in earnings, the difference between the new amortized cost basis and the cash flows expected to be collected will be accreted or amortized into net investment income. This guidance was effective for periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. We elected to adopt this guidance effective for the interim period ended March 31, 2009.

This guidance required that we record, as of the beginning of the interim period of adoption, a cumulative effect adjustment to reclassify the noncredit component of a previously recognized OTTI from retained earnings to other comprehensive income (loss). For purposes of calculating the cumulative effect adjustment, we reviewed OTTI that we had recorded through realized losses on securities held at December 31, 2008, which were \$171.1 million, and estimated the portion related to credit losses (*i.e.*, where the present value of cash flows expected to be collected are lower than the amortized cost basis of the security) and the portion related to all other factors. We determined that \$109.1 million of the OTTI previously recorded related to specific credit losses and \$62.0 million related to all other factors. We increased the amortized cost basis of these debt securities by \$62.0 million and recorded a cumulative effect adjustment, net of tax, in our shareholders' equity section. The cumulative effect adjustment had no effect on total shareholders' equity as it increased retained earnings and reduced accumulated other comprehensive income.

We performed quarterly reviews of our investments in 2009, 2008 and 2007 in order to determine whether declines in market value below the amortized cost basis were considered other-than-temporary in accordance with applicable guidance. During 2009, we recorded \$66.1 million of net impairment losses recognized in earnings, compared to \$181.2 million in 2008 and \$30.2 million in 2007. See note 7, "Investment Information Other-Than-Temporary Impairments," of the notes accompanying our consolidated financial statements for additional information.

Reclassifications

We have reclassified the presentation of certain prior year information to conform to the current presentation. Such reclassifications had no effect on our net income, shareholders' equity or cash flows.

Recent Accounting Pronouncements

See note 2(n), "Significant Accounting Policies Recent Accounting Pronouncements," of the notes accompanying our consolidated financial statements.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

Financial Condition

Investable Assets

The finance and investment committee of our board of directors establishes our investment policies and sets the parameters for creating guidelines for our investment managers. The finance and investment committee reviews the implementation of the investment strategy on a regular basis. Our current approach stresses preservation of capital, market liquidity and diversification of risk. While maintaining our emphasis on preservation of capital and liquidity, we expect our portfolio to become more diversified and, as a result, we may expand into areas which are not currently part of our investment strategy. Our Chief Investment Officer administers the investment portfolio, oversees our investment managers, formulates investment strategy in conjunction with our finance and investment committee and directly manages certain portions of our fixed income portfolio.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

On a consolidated basis, our aggregate investable assets totaled \$11.38 billion at December 31, 2009, compared to \$9.97 billion at December 31, 2008, as detailed in the table below:

	December 31,	
	2009	2008
Fixed maturities available for sale, at market value	\$ 9,391,926	\$ 8,122,221
Fixed maturities pledged under securities lending agreements, at market value (1)	208,826	626,501
Total fixed maturities	9,600,752	8,748,722
Short-term investments available for sale, at market value	571,489	479,586
Short-term investments pledged under securities lending agreements, at market value (1)	3,994	101,564
Cash	334,571	251,739
TALF investments, at market value (2)	250,265	
Other investments		
Fixed income mutual funds	63,146	39,858
Privately held securities and other	109,026	69,743
Investment funds accounted for using the equity method (3)	391,869	301,027
Total cash and investments (1)	11,325,112	9,992,239
Securities transactions entered into but not settled at the balance sheet date	50,790	(18,236)
Total investable assets	\$ 11,375,902	\$ 9,974,003

- (1) In our securities lending transactions, we receive collateral in excess of the market value of the fixed maturities and short-term investments pledged under securities lending agreements. For purposes of this table, we have excluded the investment of collateral received and reinvested at December 31, 2009 and 2008 of \$207.0 million and \$730.2 million, respectively, and included the \$212.8 million and \$728.1 million, respectively, of "fixed maturities and short-term investments pledged under securities lending agreements, at market value."
- (2) We participate in the Federal Reserve Bank of New York's ("FRBNY") Term Asset-Backed Securities Loan Facility ("TALF"), which provides secured financing for asset-backed securities backed by certain types of consumer and small-business loans and for legacy commercial mortgage-backed securities. See "Contractual Obligations and Commercial Commitments TALF Program" for further details on the TALF program.
- (3) Our investment portfolio includes certain funds that invest in fixed maturity securities which, due to the ownership structure of the funds, are accounted for by us using the equity method. In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on our proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). Changes in the carrying value of such investments are recorded as "Equity in net income (loss) of investment funds accounted for using the equity method" rather than as an unrealized gain or loss component of accumulated other comprehensive income in shareholders' equity as are changes in the carrying value of our other fixed income investments.

At December 31, 2009, our fixed income portfolio, which includes fixed maturity securities and short-term investments, had a "AA+" average credit quality rating, an average effective duration of 2.87 years, and an average yield to maturity (imbedded book yield), before investment expenses, of 3.64%. At December 31, 2008, our fixed income portfolio, which includes fixed maturity securities and short-term investments, had a "AA+" average credit quality rating, an average effective duration of 3.62 years, and an average yield to maturity (imbedded book yield), before investment expenses, of

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

4.55%. At December 31, 2009, approximately \$6.6 billion, or 58%, of total investable assets was internally managed, compared to \$5.3 billion, or 52%, at December 31, 2008. Our fixed maturities at December 31, 2009 included exposures to certain corporate sectors, such as the financial sector (8% of total investable assets) and the industrial sector (5% of total investable assets).

At December 31, 2009 and 2008, the weighted average contractual maturities of our total fixed maturity and short-term investments, based on market value, were 10.5 years and 12.0 years, respectively, while the weighted average expected maturities of our total fixed maturity and short-term investments, based on market value, were 3.9 years and 4.2 years, respectively. There were no investments in any entity in excess of 10% of our shareholders' equity at December 31, 2009 or 2008 other than investments issued or guaranteed by the United States government or its agencies.

The following table summarizes our fixed maturities and fixed maturities pledged under securities lending agreements, excluding TALF investments:

	Estimated Market Value	Gross Unrealized Gains	Gross Unrealized Losses	Amortized Cost	OTTI Unrealized Losses (1)
December 31, 2009:					
Corporate bonds	\$ 3,134,088	\$ 99,446	\$ (12,983)	\$ 3,047,625	\$ (19,815)
U.S. government and government agencies	1,553,672	8,716	(12,999)	1,557,955	(499)
Mortgage backed securities	1,449,382	13,158	(45,536)	1,481,760	(43,930)
Commercial mortgage backed securities	1,185,799	35,161	(11,724)	1,162,362	(3,750)
Municipal bonds	957,752	44,043	(2,284)	915,993	(145)
Non-U.S. government securities	752,215	41,858	(7,712)	718,069	(351)
Asset backed securities	567,844	21,713	(8,220)	554,351	(6,111)
Total	\$ 9,600,752	\$ 264,095	\$ (101,458)	\$ 9,438,115	\$ (74,601)
December 31, 2008:					
Corporate bonds	\$ 2,019,373	\$ 51,131	\$ (98,979)	\$ 2,067,221	
U.S. government and government agencies	1,463,897	77,762	(14,159)	1,400,294	
Mortgage backed securities	1,581,736	23,306	(125,759)	1,684,189	
Commercial mortgage	1,219,737	16,128	(68,212)	1,271,821	

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

backed securities				
Municipal bonds	965,966	26,815	(1,730)	940,881
Non-U.S. government securities	527,972	33,690	(31,884)	526,166
Asset backed securities	970,041	1,121	(70,762)	1,039,682
Total	\$ 8,748,722	\$ 229,953	\$ (411,485)	\$ 8,930,254

(1) Represents the total other-than-temporary impairments ("OTTI") recognized in accumulated other comprehensive income ("AOCI"). See " Critical Accounting Policies, Estimates and Recent Accounting Pronouncements Other-Than-Temporary Impairments" for further details.

The credit quality distribution of our fixed maturities and fixed maturities pledged under securities lending agreements is shown below. Approximately 95% of the fixed maturities and fixed maturities

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

pledged under securities lending agreements held by us were rated investment grade by the major rating agencies at December 31, 2009, compared to 97% at December 31, 2008.

Rating (1)	December 31, 2009		December 31, 2008	
	Estimated Market Value	% of Total	Estimated Market Value	% of Total
AAA	\$ 7,072,381	73.7	\$ 6,756,503	77.2
AA	1,281,377	13.3	815,512	9.3
A	547,104	5.7	750,947	8.6
BBB	231,988	2.4	195,319	2.2
BB	85,952	0.9	52,349	0.6
B	209,417	2.2	126,688	1.5
Lower than B	80,871	0.8	9,549	0.1
Not rated	91,662	1.0	41,855	0.5
Total	\$ 9,600,752	100.0	\$ 8,748,722	100.0

(1) Ratings as assigned by the major rating agencies.

The following table provides information on the severity of the unrealized loss position as a percentage of amortized cost for all fixed maturities and fixed maturities pledged under securities lending agreements which were in an unrealized loss position at December 31, 2009 and 2008:

Severity of Unrealized Loss	December 31, 2009			December 31, 2008		
	Estimated Market Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses	Estimated Market Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses
0-10%	\$ 2,892,977	\$ (39,362)	38.8	\$ 2,672,702	\$ (104,517)	25.4
10-20%	162,875	(28,542)	28.1	526,450	(87,438)	21.3
20-30%	36,872	(10,957)	10.8	247,798	(82,966)	20.2
30-40%	24,214	(12,204)	12.0	122,190	(65,626)	15.9
40-50%	8,031	(6,316)	6.2	55,459	(45,032)	10.9
50-60%	158	(171)	0.2	16,798	(19,741)	4.8
60-70%	69	(136)	0.1	1,680	(2,886)	0.7
70-80%	734	(1,975)	2.0	1,181	(3,279)	0.8
80-90%	99	(569)	0.6			
90-100%	19	(1,226)	1.2			
Total	\$ 3,126,048	\$ (101,458)	100.0	\$ 3,644,258	\$ (411,485)	100.0

The following table provides information on the severity of the unrealized loss position as a percentage of amortized cost for non-investment grade fixed maturities and fixed maturities pledged

Table of Contents

under securities lending agreements which were in an unrealized loss position at December 31, 2009 and 2008:

Severity of Unrealized Loss	December 31, 2009			December 31, 2008		
	Estimated Market Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses	Estimated Market Value	Gross Unrealized Losses	% of Total Gross Unrealized Losses
0-10%	\$ 64,198	\$ (2,384)	2.3	\$ 33,362	\$ (1,970)	0.5
10-20%	75,235	(13,139)	12.9	107,828	(14,293)	3.5
20-30%	8,550	(2,309)	2.3	17,781	(6,091)	1.5
30-40%	19,673	(9,704)	9.6	10,709	(5,578)	1.3
40-50%	3,303	(2,603)	2.6	15,311	(11,899)	2.9
50-60%	158	(171)	0.2	2,605	(3,179)	0.7
60-70%	69	(136)	0.1	71	(107)	0.0
70-80%	733	(1,975)	1.9	100	(254)	0.1
80-90%	99	(569)	0.6			
90-100%	19	(484)	0.5			
Total	\$ 172,037	\$ (33,474)	33.0	\$ 187,767	\$ (43,371)	10.5

At December 31, 2009 and 2008, below-investment grade securities comprised approximately 4.9% and 2.7%, respectively, of our fixed maturities and fixed maturities pledged under securities lending agreements. In accordance with our investment strategy, we invest in high yield fixed income securities which are included in "Corporate bonds." Upon issuance, these securities are typically rated below investment grade (i.e., rating assigned by the major rating agencies of "BB" or less). At December 31, 2009, corporate bonds represented 27% of the total below investment grade securities at market value, mortgage backed securities represented 69% of the total and 4% were in other classes. At December 31, 2008, corporate bonds represented 94% of the total below investment grade securities at market value while mortgage backed securities represented 6% of the total. The improvement in the percentage of below investment grade corporate bonds in 2009 primarily reflected tightening credit spreads while the higher percentage of mortgage backed securities primarily reflected rating downgrades on certain positions during 2009.

We determine estimated recovery values for our fixed maturities and fixed maturities pledged under securities lending agreements following a review of the business prospects, credit ratings, estimated loss given default factors and information received from asset managers and rating agencies for each security. For structured securities, we utilize underlying data, where available, for each security provided by asset managers and additional information from credit agencies in order to determine an expected recovery value for each security. The analysis provided by the asset managers includes expected cash flow projections under base case and stress case scenarios which modify expected default expectations and loss severities and slow down prepayment assumptions. In the tables above, securities at December 31, 2009 which were in an unrealized loss position of greater than 40% of amortized cost were primarily in asset backed and mortgage backed securities where the estimated market value for the securities was lower than our expected recovery value.

Table of Contents

The following table summarizes our top ten exposures to fixed income corporate issuers by market value at December 31, 2009, excluding guaranteed amounts:

	Estimated Market Value
JPMorgan Chase & Co.	\$ 79,681
Banco Santander SA.	63,702
General Electric Co.	60,635
Barclays PLC	54,014
Bank of America Corp.	51,402
The Goldman Sachs Group Inc.	50,471
Sovrisc BV	46,987
Citigroup Inc	46,924
Total SA	44,818
Wells Fargo & Company	42,296
Total	\$ 540,930

At December 31, 2009, we held insurance enhanced municipal bonds, net of prerefunded bonds that are escrowed in U.S. government obligations, the estimated market value of which was approximately \$382.1 million, or approximately 3.4% of our total investable assets. These securities had an average rating of "Aa2" by Moody's and "AA+" by Standard & Poor's. Giving no effect to the insurance enhancement, the overall credit quality of our insured municipal bond portfolio had an average underlying rating of "Aa3" by Moody's and "AA" by Standard & Poor's. The ratings were obtained from the individual rating agencies and were assigned a numerical amount with 1 being the highest rating. The average ratings were calculated using the weighted average market values of the individual bonds. The average ratings with and without the insurance enhancement are substantially the same at December 31, 2009. This is due to the fact that, in cases where the claims paying ratings of the guarantors are below investment grade, those ratings have been withdrawn from the bonds by the relevant rating agencies, and the insured ratings have been equated to the underlying ratings. Guarantors of our insurance enhanced municipal bonds, net of prerefunded bonds that are escrowed in U.S. government obligations, included National Public Finance Guarantee (f.k.a. MBIA Insurance Corporation) (\$148.9 million), Assured Guaranty Ltd. (\$100.5 million), Ambac Financial Group, Inc. (\$64.9 million), Financial Guaranty Insurance Company (\$41.1 million) and the Texas Permanent School Fund (\$26.7 million). We do not have a significant exposure to insurance enhanced asset-backed or mortgage-backed securities. We do not have any significant investments in companies which guarantee securities at December 31, 2009.

Our portfolio includes investments, such as mortgage-backed securities, which are subject to prepayment risk. At December 31, 2009, our investments in mortgage-backed securities ("MBS"), excluding commercial mortgage-backed securities, amounted to approximately \$1.45 billion, or 12.7% of total investable assets, compared to \$1.58 billion, or 15.9%, at December 31, 2008. As with other fixed income investments, the market value of these securities fluctuates depending on market and other general economic conditions and the interest rate environment. Changes in interest rates can expose us to changes in the prepayment rate on these investments. In periods of declining interest rates, mortgage prepayments generally increase and MBS are prepaid more quickly, requiring us to reinvest the proceeds at the then current market rates. Conversely, in periods of rising rates, mortgage prepayments generally fall, preventing us from taking full advantage of the higher level of rates. However, current economic conditions may curtail prepayment activity as refinancing becomes more difficult, thus limiting prepayments on MBS.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

Since 2007, the residential mortgage market in the U.S. has experienced a variety of difficulties. During this time, delinquencies and losses with respect to residential mortgage loans generally have increased and may continue to increase, particularly in the subprime sector. In addition, during this period, residential property values in many states have declined or remained stable, after extended periods during which those values appreciated. A continued decline or an extended flattening in those values may result in additional increases in delinquencies and losses on residential mortgage loans generally, especially with respect to second homes and investment properties, and with respect to any residential mortgage loans where the aggregate loan amounts (including any subordinate loans) are close to or greater than the related property values. These developments may have a significant adverse effect on the prices of loans and securities, including those in our investment portfolio. The situation continues to have wide ranging consequences, including downward pressure on economic growth and the potential for increased insurance and reinsurance exposures, which could have an adverse impact on our results of operations, financial condition, business and operations. Our portfolio includes commercial mortgage backed securities ("CMBS"). At December 31, 2009, CMBS constituted approximately \$1.19 billion, or 10.4% of total investable assets, compared to \$1.22 billion, or 12.2%, at December 31, 2008. The commercial real estate market has recently experienced price deterioration, which could lead to increased delinquencies and defaults on commercial real estate mortgages.

The following table provides information on our mortgage backed securities ("MBS") and CMBS at December 31, 2009, excluding amounts guaranteed by the U.S. government:

	Issuance Year	Amortized Cost	Average Credit Quality	Estimated Market Value		
				Total	% of Amortized Cost	% of Investable Assets
Non-agency MBS:						
	2003	\$ 4,377	AAA	\$ 4,190	95.7%	0.0%
	2004	23,000	A-	19,933	86.7%	0.2%
	2005	79,306	A	63,837	80.5%	0.6%
	2006	56,941	B+	47,676	83.7%	0.4%
	2007	70,703	B	60,544	85.6%	0.5%
	2008	12,402	CCC	10,024	80.8%	0.1%
	2009(6)	159,101	AAA	162,775	102.3%	1.4%
Total non-agency MBS						
		\$ 405,830	A-	\$ 368,979	90.9%	3.2%
Non-agency CMBS:						
	1998	\$ 3,713	AAA	\$ 3,749	101.0%	0.0%
	1999	251	AAA	251	100.0%	0.0%
	2000	81,217	AAA	83,085	102.3%	0.7%
	2001	244,598	AAA	249,103	101.8%	2.2%
	2002	65,330	AAA	67,669	103.6%	0.6%
	2003	73,609	AAA	75,817	103.0%	0.7%
	2004	29,770	AAA	29,304	98.4%	0.3%
	2005	86,416	AAA	84,758	98.1%	0.7%
	2006	64,528	AAA	67,414	104.5%	0.6%
	2007	50,035	AAA	52,333	104.6%	0.5%
Total non-agency CMBS						
		\$ 699,467	AAA	\$ 713,483	102.0%	6.3%

Table of Contents

Additional Statistics:	Non-Agency MBS		Non-Agency
	2009 (6)	All Other	CMBS (1)
Weighted average loan age (months)	37	48	91
Weighted average life (months) (2)	24	61	19
Weighted average loan-to-value % (3)	72.7%	69.7%	64.5%
Total delinquencies (4)	22.5%	19.1%	4.6%
Current credit support % (5)	40.4%	13.2%	27.2%

(1) Loans defeased with government/agency obligations represented approximately 28% of the collateral underlying our CMBS holdings.

(2) The weighted average life for MBS is based on the interest rates in effect at December 31, 2009. The weighted average life for CMBS reflects the average life of the collateral underlying our CMBS holdings.

(3) The range of loan-to-values on MBS is 38.4% to 87.4%, while the range of loan-to-values on CMBS is 55.4% to 77.5%.

(4) Total delinquencies includes 60 days and over.

(5) Current credit support % represents the percentage for a collateralized mortgage obligation ("CMO") or CMBS class/tranche from other subordinate classes in the same CMO or CMBS deal.

(6) Represents Re-REMICs issued in 2009 with an average credit quality of "AAA" from Fitch Ratings.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

The following table provides information on our asset backed securities ("ABS") at December 31, 2009:

Sector:	Amortized Cost	Average Credit Quality	Estimated Market Value		
			Total	% of Amortized Cost	% of Investable Assets
Autos (1)	\$ 241,889	AAA	\$ 247,324	102.2%	2.2%
Credit cards (2)	153,087	AAA	162,998	106.5%	1.4%
Rate reduction bonds (3)	83,108	AAA	86,290	103.8%	0.8%
Equipment (4)	25,923	AAA	26,596	102.6%	0.2%
Student loans (5)	20,500	AAA	21,424	104.5%	0.2%
Other	7,897	AA+	7,181	90.9%	0.1%
	532,404	AAA	551,813	103.6%	4.9%
Home equity (6)	\$ 8,559	AAA	\$ 7,161	83.7%	0.1%
	2,346	BB	1,238	52.8%	0.0%
	7,590	B	6,093	80.3%	0.1%
	1,963	CCC	1,083	55.2%	0.0%
	748	CC	311	41.6%	0.0%
	109	C	81	74.3%	0.0%
	632	D	64	10.1%	0.0%
	21,947	BBB	16,031	73.0%	0.1%
Total ABS	\$ 554,351	AAA	\$ 567,844	102.4%	5.0%

The effective duration of the total ABS was 1.2 years at December 31, 2009.

- (1) The weighted average credit support % on autos is 28.2%.
- (2) The weighted average credit support % on credit cards is 21.0%.
- (3) The weighted average credit support % on rate reduction bonds is 17.6%.
- (4) The weighted average credit support % on equipment is 9.9%.
- (5) The weighted average credit support % on student loans is 6.8%.
- (6) The weighted average credit support % on home equity is 24.0%.

At December 31, 2009, our fixed income portfolio included \$52.1 million par value in sub-prime securities with an estimated market value of \$18.5 million and an average credit quality of "BBB+" from Standard & Poor's and "Baa3" from Moody's. At December 31, 2008, our fixed income portfolio included \$65.1 million par value in sub-prime securities with an estimated market value of \$30.4 million and an average credit quality of "A." Such amounts were primarily in the home equity sector of our asset backed securities, with the balance in other ABS, MBS and CMBS sectors. We define sub-prime mortgage-backed securities as investments in which the underlying loans primarily exhibit one or more of the following characteristics: low FICO scores, above-prime interest rates, high loan-to-value ratios or high debt-to-income ratios. In addition, the portfolio of collateral backing our securities lending program contains approximately \$18.9 million estimated market value of sub-prime

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

securities with an average credit quality of "BB" from Standard & Poor's and "B2" from Moody's at December 31, 2009, compared to approximately \$56.1 million estimated market value with an average credit quality of "AA+" from Standard & Poor's at December 31, 2008.

Table of Contents

Certain of our investments, primarily those included in "other investments" and "investment funds accounted for using the equity method" on our balance sheet, may use leverage to achieve a higher rate of return. While leverage presents opportunities for increasing the total return of such investments, it may increase losses as well. Accordingly, any event that adversely affects the value of the underlying securities held by such investments would be magnified to the extent leverage is used and our potential losses from such investments would be magnified. In addition, the structures used to generate leverage may lead to such investment funds being required to meet covenants based on market valuations and asset coverage. Market valuation declines in the funds could force the sale of investments into a depressed market, which may result in significant additional losses. Alternatively, the funds may attempt to deleverage by raising additional equity or potentially changing the terms of the established financing arrangements. We may choose to participate in the additional funding of such investments. Our investment commitments related to investment funds accounted for using the equity method totaled approximately \$117.2 million at December 31, 2009.

Our investment strategy allows for the use of derivative instruments. We utilize various derivative instruments such as futures contracts to enhance investment performance, replicate investment positions or manage market exposures and duration risk that would be allowed under our investment guidelines if implemented in other ways. See note 9, "Derivative Instruments," of the notes accompanying our consolidated financial statements for additional disclosures concerning derivatives.

Other investments totaled \$172.2 million at December 31, 2009, compared to \$109.6 million at December 31, 2008. During 2009, we increased our positions in two of our fixed income mutual funds and added an equity portfolio, which we elected to carry at fair value under the fair value option afforded by accounting guidance regarding the fair value option for financial assets and liabilities. In addition, during 2009, we recorded a \$14.3 million OTTI provision in earnings on a Euro-denominated bank loan fund which was written down to zero as the fund was forced to wind down and enter liquidation during the period. Investment funds accounted for using the equity method totaled \$391.9 million at December 31, 2009, compared to \$301.0 million at December 31, 2008. See note 7, "Investment Information Other Investments" and "Investment Information Investment Funds Accounted for Using the Equity Method" of the notes accompanying our consolidated financial statements for further details.

Accounting guidance regarding fair value measurements addresses how companies should measure fair value when they are required to use a fair value measure for recognition or disclosure purposes under GAAP and provides a common definition of fair value to be used throughout GAAP. See note 8, "Fair Value" of the notes accompanying our consolidated financial statements for a summary of our financial assets and liabilities measured at fair value at December 31, 2009 and 2008 by level.

Premiums Receivable and Reinsurance Recoverables

At December 31, 2009, approximately 73% of premiums receivable of \$595.0 million represented amounts not yet due, while amounts in excess of 90 days overdue were 4.2% of the total. At December 31, 2008, approximately 62.0% of premiums receivable of \$629.0 million represented amounts not yet due, while amounts in excess of 90 days overdue were 4.1% of the total. Approximately 9.1% of the \$60.8 million of paid losses and loss adjustment expenses recoverable were in excess of 90 days overdue at December 31, 2009, compared to 2.2% of the \$63.3 million of paid losses and loss adjustment expenses recoverable at December 31, 2008. At December 31, 2009 and 2008, our reserves for doubtful accounts were approximately \$9.5 million and \$5.8 million, respectively.

At December 31, 2009, approximately 90.0% of reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.72 billion were due from carriers which had an A.M. Best rating of "A-" or better and the largest reinsurance recoverable from any one carrier was less than 5.8% of our total shareholders' equity. At December 31, 2008, approximately 88.5% of our

Table of Contents

reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.79 billion were due from carriers which had an A.M. Best rating of "A-" or better, and the largest reinsurance recoverable from any one carrier was less than 7.3% of our total shareholders' equity.

The following table details our reinsurance recoverables at December 31, 2009:

	% of Total	A.M. Best Rating (1)
Everest Reinsurance Company	14.5%	A+
Munich Reinsurance America, Inc.	6.8%	A+
Allied World Assurance Company Ltd.	6.5%	A
Odyssey America Reinsurance Corporation (2)	5.8%	A
Flatiron Re Ltd. (3)	5.7%	NR
Lloyd's syndicates (4)	5.2%	A
Transatlantic Reinsurance Company	4.8%	A
Munich Reinsurance Company	4.4%	A+
Swiss Reinsurance America Corporation	3.6%	A
ACE Property & Casualty Insurance Company	3.5%	A+
Hannover Rückversicherung AG	2.6%	A
Platinum Underwriters Reinsurance Inc.	2.5%	A
Berkley Insurance Company	2.3%	A+
Partner Reinsurance Company of the U.S.	2.0%	A+
Endurance Reinsurance Corporation	1.8%	A
All other (5)	28.0%	
Total	100.0%	

- (1) The financial strength ratings are as of February 9, 2010 and were assigned by A.M. Best based on its opinion of the insurer's financial strength as of such date. An explanation of the ratings listed in the table follows: the rating of "A+" is designated "Superior"; and the "A" and "A-" ratings are designated "Excellent." Additionally, A.M. Best has five classifications within the "Not Rated" or "NR" category. Reasons for an "NR" rating being assigned by A.M. Best include insufficient data, size or operating experience, companies which are in run-off with no active business writings or are dormant, companies which disagree with their rating and request that a rating not be published or insurers that request not to be formally evaluated for the purposes of assigning a rating opinion.
- (2) A significant portion of amounts due from Odyssey America Reinsurance Corporation is collateralized through reinsurance trusts.
- (3) Flatiron is required to contribute funds into a trust for the benefit of Arch Re Bermuda. The recoverable from Flatiron was collateralized with \$162.6 million through such trust at December 31, 2009. See note 4, "Reinsurance," of the notes accompanying our consolidated financial statements for further details on the quota share treaty with Flatiron.
- (4)

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

The A.M. Best group rating of "A" (Excellent) has been applied to all Lloyd's syndicates.

(5)

The following table provides a breakdown of the "All other" category by A.M. Best rating:

Companies rated "A-" or better	23.7%
Companies rated "B++"	0.1%
Companies not rated (6)	4.2%
Total	28.0%

(6)

A substantial portion of such amount is collateralized through reinsurance trusts or letters of credit.

Table of Contents**Reserves for Losses and Loss Adjustment Expenses**

We establish reserves for losses and loss adjustment expenses ("Loss Reserves") which represent estimates involving actuarial and statistical projections, at a given point in time, of our expectations of the ultimate settlement and administration costs of losses incurred. Estimating Loss Reserves is inherently difficult, which is exacerbated by the fact that we are a relatively new company with relatively limited historical experience upon which to base such estimates. We utilize actuarial models as well as available historical insurance industry loss ratio experience and loss development patterns to assist in the establishment of Loss Reserves. Actual losses and loss adjustment expenses paid will deviate, perhaps substantially, from the reserve estimates reflected in our financial statements.

The following table provides a reconciliation of the net Loss Reserves for 2009, 2008 and 2007:

	Years Ended December 31,		
	2009	2008	2007
Net reserve for losses and loss adjustment expenses at beginning of year	\$ 5,937,822	\$ 5,482,833	\$ 4,910,884
Net incurred losses and loss adjustment expenses related to losses occurring in:			
Current year	1,843,875	2,158,914	1,829,534
Prior years	(189,201)	(310,170)	(185,364)
Total net incurred losses and loss adjustment expenses	1,654,674	1,848,744	1,644,170
Foreign exchange (gains) losses	60,506	(133,881)	45,192
Total net paid losses and loss adjustment expenses	(1,439,090)	(1,259,874)	(1,117,413)
Net reserve for losses and loss adjustment expenses at end of year	\$ 6,213,912	\$ 5,937,822	\$ 5,482,833

See "Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies, Estimates and Recent Accounting Pronouncements Reserves for Losses and Loss Adjustment Expenses" and "Business Reserves" for further details.

Shareholders' Equity

Our shareholders' equity was \$4.32 billion at December 31, 2009, compared to \$3.43 billion at December 31, 2008. The increase of \$890.4 million in 2009 was attributable to net income and an after-tax increase in the market value of our investment portfolio, partially offset by share repurchase activity in the period.

Book Value per Share

The following table presents the calculation of book value per common share at December 31, 2009 and 2008:

	December 31,	
	2009	2008
Calculation of book value per common share:		
Total shareholders' equity	\$ 4,323,349	\$ 3,432,965
Less preferred shareholders' equity	(325,000)	(325,000)
Common shareholders' equity	\$ 3,998,349	\$ 3,107,965
Common shares outstanding (1)	54,761,678	60,511,974
Book value per common share	\$ 73.01	\$ 51.36

- (1) Excludes the effects of 5,016,104 and 5,131,135 stock options and 261,012 and 412,622 restricted stock units outstanding at December 31, 2009 and December 31, 2008, respectively.

Table of Contents

Liquidity and Capital Resources

ACGL is a holding company whose assets primarily consist of the shares in its subsidiaries. Generally, ACGL depends on its available cash resources, liquid investments and dividends or other distributions from its subsidiaries to make payments, including the payment of debt service obligations and operating expenses it may incur and any dividends or liquidation amounts with respect to the series A non-cumulative and series B non-cumulative preferred shares and common shares. ACGL's readily available cash, short-term investments and marketable securities, excluding amounts held by our regulated insurance and reinsurance subsidiaries, totaled \$25.7 million at December 31, 2009, compared to \$16.8 million at December 31, 2008. During 2009, ACGL received dividends of \$530.4 million from Arch Re Bermuda which were used to fund the share repurchase program described below along with the payment of preferred dividends, interest expense and other corporate expenses.

The ability of our regulated insurance and reinsurance subsidiaries to pay dividends or make distributions or other payments to us is dependent on their ability to meet applicable regulatory standards. Under Bermuda law, Arch Re Bermuda is required to maintain an enhanced capital requirement which must equal or exceed its minimum solvency margin (*i.e.*, the amount by which the value of its general business assets must exceed its general business liabilities) equal to the greatest of (1) \$100.0 million, (2) 50% of net premiums written (being gross premiums written by us less any premiums ceded by us, but we may not deduct more than 25% of gross premiums when computing net premiums written) and (3) 15% of loss and other insurance reserves. Arch Re Bermuda is prohibited from declaring or paying any dividends during any financial year if it is not in compliance with its enhanced capital requirement, minimum solvency margin or minimum liquidity ratio. In addition, Arch Re Bermuda is prohibited from declaring or paying in any financial year dividends of more than 25% of its total statutory capital and surplus (as shown on its previous financial year's statutory balance sheet) unless it files, at least seven days before payment of such dividends, with the Bermuda Monetary Authority an affidavit stating that it will continue to meet the required margins. In addition, Arch Re Bermuda is prohibited, without prior approval of the Bermuda Monetary Authority, from reducing by 15% or more its total statutory capital, as set out in its previous year's statutory financial statements. Arch Re Bermuda is required to meet enhanced capital requirements and a target capital level (defined as 120% of the enhanced capital requirements) as calculated using a new risk based capital model called the Bermuda Solvency Capital Requirement ("BSCR") model. At December 31, 2009, as determined under Bermuda law, Arch Re Bermuda had statutory capital of \$2.23 billion (\$2.21 billion at December 31, 2008) and statutory capital and surplus of \$4.26 billion (\$3.34 billion at December 31, 2008), which amounts were in compliance with Arch Re Bermuda's enhanced capital requirement at such date. Such amounts include ownership interests in U.S. insurance and reinsurance subsidiaries. Accordingly, Arch Re Bermuda can pay approximately \$1.07 billion to ACGL during 2010 without providing an affidavit to the Bermuda Monetary Authority, as discussed above. In addition to meeting applicable regulatory standards, the ability of our insurance and reinsurance subsidiaries to pay dividends to intermediate parent companies owned by Arch Re Bermuda is also constrained by our dependence on the financial strength ratings of our insurance and reinsurance subsidiaries from independent rating agencies. The ratings from these agencies depend to a large extent on the capitalization levels of our insurance and reinsurance subsidiaries. We believe that ACGL has sufficient cash resources and available dividend capacity to service its indebtedness and other current outstanding obligations.

Our insurance and reinsurance subsidiaries are required to maintain assets on deposit, which primarily consist of fixed maturities, with various regulatory authorities to support their operations. The assets on deposit are available to settle insurance and reinsurance liabilities to third parties. Our insurance and reinsurance subsidiaries also have investments in segregated portfolios primarily to provide collateral or guarantees for letters of credit to third parties. At December 31, 2009 and 2008, such amounts approximated \$1.49 billion and \$1.28 billion, respectively. In addition, certain of our operating subsidiaries maintain assets in trust accounts as collateral for insurance and reinsurance

Table of Contents

transactions with affiliated companies. At December 31, 2009 and 2008, such amounts approximated \$4.28 billion and \$4.03 billion, respectively.

ACGL, through its subsidiaries, provides financial support to certain of its insurance subsidiaries and affiliates, through certain reinsurance arrangements essential to the ratings of such subsidiaries. Except as described in the preceding sentence, or where express reinsurance, guarantee or other financial support contractual arrangements are in place, each of ACGL's subsidiaries or affiliates is solely responsible for its own liabilities and commitments (and no other ACGL subsidiary or affiliate is so responsible). Any reinsurance arrangements, guarantees or other financial support contractual arrangements that are in place are solely for the benefit of the ACGL subsidiary or affiliate involved and third parties (creditors or insureds of such entity) are not express beneficiaries of such arrangements.

Our insurance and reinsurance operations provide liquidity in that premiums are received in advance, sometimes substantially in advance, of the time losses are paid. The period of time from the occurrence of a claim through the settlement of the liability may extend many years into the future. Sources of liquidity include cash flows from operations, financing arrangements or routine sales of investments.

As part of our investment strategy, we seek to establish a level of cash and highly liquid short-term and intermediate-term securities which, combined with expected cash flow, is believed by us to be adequate to meet our foreseeable payment obligations. However, due to the nature of our operations, cash flows are affected by claim payments that may comprise large payments on a limited number of claims and which can fluctuate from year to year. We believe that our liquid investments and cash flow will provide us with sufficient liquidity in order to meet our claim payment obligations. However, the timing and amounts of actual claim payments related to recorded Loss Reserves vary based on many factors, including large individual losses, changes in the legal environment, as well as general market conditions. The ultimate amount of the claim payments could differ materially from our estimated amounts. Certain lines of business written by us, such as excess casualty, have loss experience characterized as low frequency and high severity. The foregoing may result in significant variability in loss payment patterns. The impact of this variability can be exacerbated by the fact that the timing of the receipt of reinsurance recoverables owed to us may be slower than anticipated by us. Therefore, the irregular timing of claim payments can create significant variations in cash flows from operations between periods and may require us to utilize other sources of liquidity to make these payments, which may include the sale of investments or utilization of existing or new credit facilities or capital market transactions. If the source of liquidity is the sale of investments, we may be forced to sell such investments at a loss, which may be material.

Our investments in certain securities, including certain fixed income and structured securities, investments in funds accounted for using the equity method, other investments and our investment in Gulf Re (joint venture) may be illiquid due to contractual provisions or investment market conditions. If we require significant amounts of cash on short notice in excess of anticipated cash requirements, then we may have difficulty selling these investments in a timely manner or may be forced to sell or terminate them at unfavorable values.

Consolidated net cash provided by operating activities was \$992.6 million for 2009, compared to \$1.14 billion for 2008. The lower level of operating cash flows in 2009 primarily resulted from an increase in paid losses, as our insurance and reinsurance loss reserves have continued to mature, partially offset by an increase in net premium collections. Cash flow from operating activities are provided by premiums collected, fee income, investment income and collected reinsurance recoverables, offset by losses and loss adjustment expense payments, reinsurance premiums paid, operating costs and current taxes paid.

Table of Contents

On a consolidated basis, our aggregate cash and invested assets totaled \$11.3 billion at December 31, 2009, compared to \$10.0 billion at December 31, 2008. The primary goals of our asset liability management process are to satisfy the insurance liabilities, manage the interest rate risk embedded in those insurance liabilities and maintain sufficient liquidity to cover fluctuations in projected liability cash flows, including debt service obligations. Generally, the expected principal and interest payments produced by our fixed income portfolio adequately fund the estimated runoff of our insurance reserves. Although this is not an exact cash flow match in each period, the substantial degree by which the market value of the fixed income portfolio exceeds the expected present value of the net insurance liabilities, as well as the positive cash flow from newly sold policies and the large amount of high quality liquid bonds, provide assurance of our ability to fund the payment of claims and to service our outstanding debt without having to sell securities at distressed prices in an illiquid market or access credit facilities.

We expect that our operational needs, including our anticipated insurance obligations and operating and capital expenditure needs, for the next twelve months, at a minimum, will be met by our balance of cash, short-term investments and our credit facilities, as well as by funds generated from underwriting activities and investment income and proceeds on the sale or maturity of our investments.

We monitor our capital adequacy on a regular basis and will seek to adjust our capital base (up or down) according to the needs of our business. The future capital requirements of our business will depend on many factors, including our ability to write new business successfully and to establish premium rates and reserves at levels sufficient to cover losses. Our ability to underwrite is largely dependent upon the quality of our claims paying and financial strength ratings as evaluated by independent rating agencies. In particular, we require (1) sufficient capital to maintain our financial strength ratings, as issued by several ratings agencies, at a level considered necessary by management to enable our key operating subsidiaries to compete; (2) sufficient capital to enable our underwriting subsidiaries to meet the capital adequacy tests performed by statutory agencies in the U.S. and other key markets; and (3) letters of credit and other forms of collateral that are necessary for our non-U.S. operating companies because they are "non-admitted" under U.S. state insurance regulations.

As part of our capital management program, we may seek to raise additional capital or may seek to return capital to our shareholders through share repurchases, cash dividends or other methods (or a combination of such methods). Any such determination will be at the discretion of our board of directors and will be dependent upon our profits, financial requirements and other factors, including legal restrictions, rating agency requirements and such other factors as our board of directors deems relevant.

In November 2009, the board of directors of ACGL authorized the investment of up to an additional \$1.0 billion in ACGL's common shares through a share repurchase program. Repurchases under this authorization may be effected from time to time in open market or privately negotiated transactions through December 31, 2011. The board of directors of ACGL had previously authorized the investment of up to \$1.5 billion in ACGL's common shares. During 2009, ACGL repurchased 6.7 million common shares for an aggregate purchase price of \$458.4 million and from January 1 to February 23, 2010, ACGL repurchased 2.1 million common shares for an aggregate purchase price of \$146.9 million. Since the inception of the share repurchase program in February 2007 through February 23, 2010, ACGL has repurchased 24.0 million common shares for an aggregate purchase price of \$1.66 billion. At February 23, 2010, \$844.6 million of repurchases were available under the share repurchase program.

The timing and amount of the repurchase transactions under this program will depend on a variety of factors, including market conditions and corporate and regulatory considerations. We will continue to monitor our share price and, depending upon results of operations, market conditions and the development of the economy, as well as other factors, we will consider share repurchases on an opportunistic basis.

Table of Contents

To the extent that our existing capital is insufficient to fund our future operating requirements or maintain such ratings, we may need to raise additional funds through financings or limit our growth. Given the recent severe disruptions in the public debt and equity markets, including among other things, widening of credit spreads, lack of liquidity and bankruptcies, we can provide no assurance that, if needed, we would be able to obtain additional funds through financing on satisfactory terms or at all. Continued adverse developments in the financial markets, such as disruptions, uncertainty or volatility in the capital and credit markets, may result in realized and unrealized capital losses that could have a material adverse effect on our results of operations, financial position and our businesses, and may also limit our access to capital required to operate our business.

If we are not able to obtain adequate capital, our business, results of operations and financial condition could be adversely affected, which could include, among other things, the following possible outcomes: (1) potential downgrades in the financial strength ratings assigned by ratings agencies to our operating subsidiaries, which could place those operating subsidiaries at a competitive disadvantage compared to higher-rated competitors; (2) reductions in the amount of business that our operating subsidiaries are able to write in order to meet capital adequacy-based tests enforced by statutory agencies; and (3) any resultant ratings downgrades could, among other things, affect our ability to write business and increase the cost of bank credit and letters of credit. In addition, under certain of the reinsurance agreements assumed by our reinsurance operations, upon the occurrence of a ratings downgrade or other specified triggering event with respect to our reinsurance operations, such as a reduction in surplus by specified amounts during specified periods, our ceding company clients may be provided with certain rights, including, among other things, the right to terminate the subject reinsurance agreement and/or to require that our reinsurance operations post additional collateral.

In addition to common share capital, we depend on external sources of finance to support our underwriting activities, which can be in the form (or any combination) of debt securities, preference shares, common equity and bank credit facilities providing loans and/or letters of credit. As noted above, equity or debt financing, if available at all, may be on terms that are unfavorable to us. In the case of equity financings, dilution to our shareholders could result, and, in any case, such securities may have rights, preferences and privileges that are senior to those of our outstanding securities.

In 2006, we entered into a five-year agreement for a \$300.0 million unsecured revolving loan and letter of credit facility and a \$1.0 billion secured letter of credit facility. Under the terms of the agreement, Arch Reinsurance Company ("Arch Re U.S.") is limited to issuing \$100 million of unsecured letters of credit as part of the \$300 million unsecured revolving loan. Arch Re Bermuda also has access to other letter of credit facilities, some of which are available on a limited basis for limited purposes. See "Contractual Obligations and Commercial Commitments Letters of Credit and Revolving Credit Facilities" for a discussion of our available facilities, applicable covenants on such facilities and available capacity. It is anticipated that the available facilities will be renewed (or replaced) on expiry, but such renewal (or replacement) will be subject to the availability of credit from banks which we utilize. Given the recent disruptions in the capital markets, we can provide no assurance that we will be able to renew the facilities in August 2011 on satisfactory terms and, if renewed, the costs of the facilities may be significantly higher than the costs of our existing facilities.

During 2006, ACGL completed two public offerings of non-cumulative preferred shares. On February 1, 2006, \$200.0 million principal amount of 8.0% series A non-cumulative preferred shares ("series A preferred shares") were issued with net proceeds of \$193.5 million and, on May 24, 2006, \$125.0 million principal amount of 7.875% series B non-cumulative preferred shares ("series B preferred shares" and together with the series A preferred shares, the "preferred shares") were issued with net proceeds of \$120.9 million. The net proceeds of the offerings were used to support the underwriting activities of ACGL's insurance and reinsurance subsidiaries. ACGL has the right to redeem all or a portion of each series of preferred shares at a redemption price of \$25.00 per share on or after (1) February 1, 2011 for the series A preferred shares and (2) May 15, 2011 for the series B

Table of Contents

preferred shares. Dividends on the preferred shares are non-cumulative. Consequently, in the event dividends are not declared on the preferred shares for any dividend period, holders of preferred shares will not be entitled to receive a dividend for such period, and such undeclared dividend will not accrue and will not be payable. Holders of preferred shares will be entitled to receive dividend payments only when, as and if declared by ACGL's board of directors or a duly authorized committee of ACGL's board of directors. Any such dividends will be payable from the date of original issue on a non-cumulative basis, quarterly in arrears. To the extent declared, these dividends will accumulate, with respect to each dividend period, in an amount per share equal to 8.0% of the \$25.00 liquidation preference per annum for the series A preferred shares and 7.875% of the \$25.00 liquidation preference per annum for the series B preferred shares. During 2009, 2008 and 2007, we paid \$25.8 million to holders of the preferred shares and, at December 31, 2009, had declared an aggregate of \$3.3 million of dividends to be paid to holders of the preferred shares.

In March 2009, ACGL and Arch Capital Group (U.S.) Inc. filed a universal shelf registration statement with the SEC. This registration statement allows for the possible future offer and sale by us of various types of securities, including unsecured debt securities, preference shares, common shares, warrants, share purchase contracts and units and depository shares. The shelf registration statement enables us to efficiently access the public debt and/or equity capital markets in order to meet our future capital needs. The shelf registration statement also allows selling shareholders to resell common shares that they own in one or more offerings from time to time. We will not receive any proceeds from any shares offered by the selling shareholders. This report is not an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any state in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state.

During the 2009 third quarter, we purchased asset-backed and commercial mortgage-backed securities under the FRBNY's TALF program. As of December 31, 2009, we had \$250.3 million of securities under the TALF program which are reflected as "TALF investments, at market value" and \$217.6 million of secured financing from the FRBNY which is reflected as "TALF borrowings, at market value." See " Contractual Obligations and Commercial Commitments TALF Program" for further details on the TALF program.

At December 31, 2009, ACGL's capital of \$4.72 billion consisted of \$300.0 million of senior notes, representing 6.4% of the total, \$100.0 million of revolving credit agreement borrowings due in August 2011, representing 2.1% of the total, \$325.0 million of preferred shares, representing 6.9% of the total, and common shareholders' equity of \$4.0 billion, representing the balance. At December 31, 2008, ACGL's capital of \$3.83 billion consisted of \$300.0 million of senior notes, representing 7.8% of the total, \$100.0 million of revolving credit agreement borrowings due in August 2011, representing 2.6% of the total, \$325.0 million of preferred shares, representing 8.5% of the total, and common shareholders' equity of \$3.11 billion, representing the balance. TALF borrowings are not included in the calculation of total capital. The increase in capital during 2009 was primarily attributable to net income and an after-tax increase in the market value of our investment portfolio.

NATURAL AND MAN-MADE CATASTROPHIC EVENTS

We have large aggregate exposures to natural and man-made catastrophic events. Catastrophes can be caused by various events, including hurricanes, floods, windstorms, earthquakes, hailstorms, tornados, explosions, severe winter weather, fires, droughts and other natural disasters. Catastrophes can also cause losses in non-property business such as workers' compensation or general liability. In addition to the nature of property business, we believe that economic and geographic trends affecting insured property, including inflation, property value appreciation and geographic concentration, tend to generally increase the size of losses from catastrophic events over time.

Table of Contents

We have substantial exposure to unexpected, large losses resulting from future man-made catastrophic events, such as acts of war, acts of terrorism and political instability. These risks are inherently unpredictable. It is difficult to predict the timing of such events with statistical certainty or estimate the amount of loss any given occurrence will generate. It is not possible to completely eliminate our exposure to unforecasted or unpredictable events and, to the extent that losses from such risks occur, our financial condition and results of operations could be materially adversely affected. Therefore, claims for natural and man-made catastrophic events could expose us to large losses and cause substantial volatility in our results of operations, which could cause the value of our common shares to fluctuate widely. In certain instances, we specifically insure and reinsure risks resulting from terrorism. Even in cases where we attempt to exclude losses from terrorism and certain other similar risks from some coverages written by us, we may not be successful in doing so. Moreover, irrespective of the clarity and inclusiveness of policy language, there can be no assurance that a court or arbitration panel will limit enforceability of policy language or otherwise issue a ruling adverse to us.

We seek to limit our loss exposure by writing a number of our reinsurance contracts on an excess of loss basis, adhering to maximum limitations on reinsurance written in defined geographical zones, limiting program size for each client and prudent underwriting of each program written. In the case of proportional treaties, we may seek per occurrence limitations or loss ratio caps to limit the impact of losses from any one or series of events. In our insurance operations, we seek to limit our exposure through the purchase of reinsurance. We cannot be certain that any of these loss limitation methods will be effective. We also seek to limit our loss exposure by geographic diversification. Geographic zone limitations involve significant underwriting judgments, including the determination of the area of the zones and the inclusion of a particular policy within a particular zone's limits. There can be no assurance that various provisions of our policies, such as limitations or exclusions from coverage or choice of forum, will be enforceable in the manner we intend. Disputes relating to coverage and choice of legal forum may also arise. Underwriting is inherently a matter of judgment, involving important assumptions about matters that are inherently unpredictable and beyond our control, and for which historical experience and probability analysis may not provide sufficient guidance. One or more catastrophic or other events could result in claims that substantially exceed our expectations, which could have a material adverse effect on our financial condition or our results of operations, possibly to the extent of eliminating our shareholders' equity.

For our natural catastrophe exposed business, we seek to limit the amount of exposure we will assume from any one insured or reinsured and the amount of the exposure to catastrophe losses from a single event in any geographic zone. We monitor our exposure to catastrophic events, including earthquake and wind and periodically reevaluate the estimated probable maximum pre-tax loss for such exposures. Our estimated probable maximum pre-tax loss is determined through the use of modeling techniques, but such estimate does not represent our total potential loss for such exposures. Our models employ both proprietary and vendor-based systems and include cross-line correlations for property, marine, offshore energy, aviation, workers compensation and personal accident. We seek to limit the probable maximum pre-tax loss to a specific level for severe catastrophic events. Currently, we seek to limit our 1-in-250 year return period net probable maximum loss from a severe catastrophic event in any geographic zone to approximately 25% of total shareholders' equity. We reserve the right to change this threshold at any time. Net probable maximum loss estimates are net of expected reinsurance recoveries, before income tax and before excess reinsurance reinstatement premiums. Loss estimates are reflective of the zone indicated and not the entire portfolio. Since hurricanes and windstorms can affect more than one zone and make multiple landfalls, our loss estimates include clash estimates from other zones. Our loss estimates do not represent our maximum exposures and it is highly likely that our actual incurred losses would vary materially from the modeled estimates. There can be no assurances that we will not suffer pre-tax losses greater than 25% of our total shareholders' equity from one or more catastrophic events due to several factors, including the inherent uncertainties in estimating the frequency and severity of such events and the margin of error in making such

Table of Contents

determinations resulting from potential inaccuracies and inadequacies in the data provided by clients and brokers, the modeling techniques and the application of such techniques or as a result of a decision to change the percentage of shareholders' equity exposed to a single catastrophic event. In addition, actual losses may increase if our reinsurers fail to meet their obligations to us or the reinsurance protections purchased by us are exhausted or are otherwise unavailable. See "Risk Factors Risk Relating to Our Industry" and "Management's Discussion and Analysis of Financial Condition and Results of Operations Natural and Man-Made Catastrophic Events." Depending on business opportunities and the mix of business that may comprise our insurance and reinsurance portfolio, we may seek to adjust our self-imposed limitations on probable maximum pre-tax loss for catastrophe exposed business. See "Critical Accounting Policies, Estimates and Recent Accounting Pronouncements Ceded Reinsurance" for a discussion of our catastrophe reinsurance programs.

CONTRACTUAL OBLIGATIONS AND COMMERCIAL COMMITMENTS

Letter of Credit and Revolving Credit Facilities

As of December 31, 2009, we had a \$300 million unsecured revolving loan and letter of credit facility and a \$1.0 billion secured letter of credit facility (the "Credit Agreement"). Under the terms of the agreement, Arch Re U.S. is limited to issuing \$100 million of unsecured letters of credit as part of the \$300 million unsecured revolving loan. Borrowings of revolving loans may be made by ACGL and Arch Re U.S. at a variable rate based on LIBOR or an alternative base rate at our option. Secured letters of credit are available for issuance on behalf of our insurance and reinsurance subsidiaries. The Credit Agreement and related documents are structured such that each party that requests a letter of credit or borrowing does so only for itself and for only its own obligations. Issuance of letters of credit and borrowings under the Credit Agreement are subject to our compliance with certain covenants and conditions, including absence of a material adverse change. These covenants require, among other things, that we maintain a debt to total capital ratio of not greater than 0.35 to 1 and shareholders' equity in excess of \$1.95 billion plus 25% of future aggregate net income for each quarterly period (not including any future net losses) beginning after June 30, 2006 and 25% of future aggregate proceeds from the issuance of common or preferred equity and that our principal insurance and reinsurance subsidiaries maintain at least a "B++" rating from A.M. Best. In addition, certain of our subsidiaries which are party to the Credit Agreement are required to maintain minimum shareholders' equity levels. We were in compliance with all covenants contained in the Credit Agreement at December 31, 2009. The Credit Agreement expires on August 30, 2011.

Including the secured letter of credit portion of the Credit Agreement, we had access to letter of credit facilities for up to a total of \$1.45 billion. Arch Re Bermuda also has access to other letter of credit facilities, some of which are available on a limited basis and for limited purposes (together with the secured portion of the Credit Agreement and these letter of credit facilities, the "LOC Facilities"). The principal purpose of the LOC Facilities is to issue, as required, evergreen standby letters of credit in favor of primary insurance or reinsurance counterparties with which we have entered into reinsurance arrangements to ensure that such counterparties are permitted to take credit for reinsurance obtained from our reinsurance subsidiaries in United States jurisdictions where such subsidiaries are not licensed or otherwise admitted as an insurer, as required under insurance regulations in the United States, and to comply with requirements of Lloyd's in connection with qualifying quota share and other arrangements. The amount of letters of credit issued is driven by, among other things, the timing and payment of catastrophe losses, loss development of existing reserves, the payment pattern of such reserves, the further expansion of our business and the loss experience of such business. When issued, certain letters of credit are secured by a portion of our investment portfolio. In addition, the LOC Facilities also require the maintenance of certain covenants, which we were in compliance with at December 31, 2009. At such date, we had \$775.7 million in outstanding letters of credit under the LOC Facilities, which were secured by investments with a market

Table of Contents

value of \$907.6 million. In May 2008, we borrowed \$100.0 million under the Credit Agreement at a company-selected variable interest rate that is based on 1 month, 3 month or 6 month reset option terms and their corresponding term LIBOR rates plus 27.5 basis points. The proceeds from such borrowings are repayable in August 2011.

Senior Notes

In May 2004, ACGL completed a public offering of \$300.0 million principal amount of 7.35% senior notes ("Senior Notes") due May 1, 2034 and received net proceeds of \$296.4 million. ACGL used \$200.0 million of the net proceeds to repay all amounts outstanding under a revolving credit agreement. The Senior Notes are ACGL's senior unsecured obligations and rank equally with all of its existing and future senior unsecured indebtedness. Interest payments on the Senior Notes are due on May 1st and November 1st of each year. ACGL may redeem the Senior Notes at any time and from time to time, in whole or in part, at a "make-whole" redemption price. For 2009, 2008 and 2007, interest expense on the Senior Notes was \$22.1 million. The market value of the Senior Notes at December 31 2009 and 2008 was \$298.6 million and \$246.1 million, respectively.

TALF Program

During the 2009 third quarter, we purchased asset-backed and commercial mortgage-backed securities under the FRBNY TALF program. TALF provides secured financing for asset-backed securities backed by certain types of consumer and small business loans and for legacy commercial mortgage-backed securities. TALF financing is non-recourse to us, except in certain limited instances, and is collateralized by the purchased securities and provides financing for the purchase price of the securities, less a 'haircut' that varies based on the type of collateral. We can deliver the collateralized securities to a special purpose vehicle created by the FRBNY in full defeasance of the borrowings.

As of December 31, 2009, we had \$250.3 million of securities under TALF, consisting of 13 individual TALF investments, which are reflected as "TALF investments, at market value" and \$217.6 million of secured financing from the FRBNY which is reflected as "TALF borrowings, at market value." The maturity dates for the TALF borrowings range from July 2012 to September 2014, with interest rates that range from approximately 1.2% to 3.9% based on either variable or fixed interest rates depending on the related TALF investments.

Investment in Joint Venture

In May 2008, we provided \$100.0 million of funding to Gulf Reinsurance Limited ("Gulf Re"), a newly formed reinsurer based in the Dubai International Financial Centre, pursuant to the joint venture agreement with Gulf Investment Corporation GSC ("GIC"). Under the agreement, Arch Re Bermuda and GIC each own 50% of Gulf Re, which commenced underwriting activities in June 2008. Gulf Re targets the six member states of the Gulf Cooperation Council ("GCC"), which include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. Gulf Re provides property and casualty reinsurance primarily in the member states of the GCC. The initial capital of the joint venture consisted of \$200.0 million with an additional \$200.0 million commitment to be funded equally by us and GIC depending on the joint venture's business needs. We account for our investment in Gulf Re, shown as "Investment in joint venture," using the equity method and records its equity in the operating results of Gulf Re in "Other income" on a quarter lag basis.

Table of Contents**Contractual Obligations**

The following table provides an analysis of our contractual commitments at December 31, 2009:

	Total	Less than 1 year	Payment due by period		
			1 - 3 years	4 - 5 years	More than 5 years
Long-term debt obligations	\$ 400,000		\$ 100,000		\$ 300,000
Interest expense on long-term debt obligations	540,225	22,050	44,100	44,100	429,975
TALF borrowings	217,565		111,665	105,900	
Operating lease obligations	135,784	15,819	29,774	24,696	65,495
Purchase obligations	22,048	10,042	11,033	973	
Reserves for losses and loss adjustment expenses, gross (1)	7,873,412	2,299,638	2,560,959	1,201,219	1,811,596
Deposit accounting liabilities (2)	38,187	4,008	6,988	7,539	19,652
Securities lending collateral (3)	219,116	219,116			
Investment in joint venture (4)	100,000				100,000
Unfunded investment commitments	117,216	117,216			
Total	\$ 9,663,553	\$ 2,687,889	\$ 2,864,519	\$ 1,384,427	\$ 2,726,718

- (1) The estimated expected contractual commitments related to the reserves for losses and loss adjustment expenses are presented on a gross basis. It should be noted that until a claim has been presented to us, determined to be valid, quantified and settled, there is no known obligation on an individual transaction basis, and while estimable in the aggregate, the timing and amount contain significant uncertainty. Approximately 68% of our net reserves were incurred but not reported at December 31, 2009.
- (2) The estimated expected contractual commitments related to deposit accounting liabilities have been estimated using projected cash flows from the underlying contracts. It should be noted that, due to the nature of such liabilities, the timing and amount contain significant uncertainty.
- (3) As part of our securities lending program, we loan certain fixed income securities to third parties and receive collateral, primarily in the form of cash. The collateral received is reinvested and is reflected as "Investment of funds received under securities lending agreements, at market value" and "Securities purchased under agreements to resell using funds received under securities lending agreements." Such collateral is due back to the third parties at the close of the securities lending transaction.
- (4) We have committed an additional \$100.0 million to our investment in Gulf Re depending on the joint venture's business needs. We do not anticipate that additional funding will be required in the next five years.

OFF-BALANCE SHEET ARRANGEMENTS

We are not party to any transaction, agreement or other contractual arrangement to which an entity unconsolidated with us is a party that management believes is reasonably likely to have a current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors. We concluded that we are required to consolidate the assets, liabilities and results of operations (if any) of a certain managing general agency in which one of our subsidiaries has an investment. Such agency ceased producing business in 1999 and is currently running-off its operations. Based on current information, there are no assets or liabilities of such agency required to be reflected on the face of our consolidated financial statements that are not,

Table of Contents

or have not been previously, otherwise reflected therein. In addition, we determined that Flatiron is a variable interest entity but we are not required to consolidate the assets, liabilities and results of operations of Flatiron. Under the amended guidance governing accounting for VIEs, which is effective January 1, 2010, we do not expect that Flatiron will be considered a variable interest entity. See note 2 (n), "Recent Accounting Pronouncements," for information on the amended guidance. See note 4, "Reinsurance," of the notes accompanying our consolidated financial statements for information on Flatiron.

MARKET SENSITIVE INSTRUMENTS AND RISK MANAGEMENT

Our investment results are subject to a variety of risks, including risks related to changes in the business, financial condition or results of operations of the entities in which we invest, as well as changes in general economic conditions and overall market conditions. We are also exposed to potential loss from various market risks, including changes in equity prices, interest rates and foreign currency exchange rates.

In accordance with the SEC's Financial Reporting Release No. 48, we performed a sensitivity analysis to determine the effects that market risk exposures could have on the future earnings, market values or cash flows of our financial instruments as of December 31, 2009. Market risk represents the risk of changes in the market value of a financial instrument and consists of several components, including liquidity, basis and price risks.

The sensitivity analysis performed as of December 31, 2009 presents hypothetical losses in cash flows, earnings and market values of market sensitive instruments which were held by us on December 31, 2009 and are sensitive to changes in interest rates and equity security prices. This risk management discussion and the estimated amounts generated from the following sensitivity analysis represent forward-looking statements of market risk assuming certain adverse market conditions occur. Actual results in the future may differ materially from these projected results due to actual developments in the global financial markets. The analysis methods used by us to assess and mitigate risk should not be considered projections of future events of losses.

The focus of the SEC's market risk rules is on price risk. For purposes of specific risk analysis, we employ sensitivity analysis to determine the effects that market risk exposures could have on the future earnings, market values or cash flows of our financial instruments. The financial instruments included in the following sensitivity analysis consist of all of our investments and cash.

Investment Market Risk

Fixed Income Securities. We invest in interest rate sensitive securities, primarily debt securities. We consider the effect of interest rate movements on the market value of our fixed maturities, fixed maturities pledged under securities lending agreements, short-term investments and certain of our other investments which invest in fixed income securities and the corresponding change in unrealized appreciation. As interest rates rise, the market value of our interest rate sensitive securities falls, and the converse is also true.

The following table summarizes the effect that an immediate, parallel shift in the interest rate yield curve would have had on the portfolio at December 31, 2009 and 2008. Based on historical observations, there is a low probability that all interest rate yield curves would shift in the same direction at the same time. Furthermore, interest rate movements in many credit sectors during 2009 and 2008 have exhibited a much lower correlation to changes in U.S. Treasury yields. Accordingly, the actual effect of interest rate movements may differ materially from the amounts set forth below. For

Table of Contents

further discussion on investment activity, please refer to " Financial Condition, Liquidity and Capital Resources Financial Condition Investable Assets."

(U.S. dollars in millions)	Interest Rate Shift in Basis Points				
	-100	-50	0	50	100
December 31, 2009:					
Total market value	\$ 11,227.5	\$ 11,078.3	\$ 10,920.7	\$ 10,757.7	\$ 10,593.9
Market value change from base	2.81%	1.44%		(1.49)%	(2.99)%
Change in unrealized value	\$ 306.8	\$ 157.6		\$ (163.0)	\$ (326.8)
December 31, 2008:					
Total market value	\$ 9,999.5	\$ 9,832.3	\$ 9,641.7	\$ 9,481.8	\$ 9,312.7
Market value change from base	3.71%	1.98%		(1.66)%	(3.41)%
Change in unrealized value	\$ 357.8	\$ 190.6		\$ (159.9)	\$ (329.0)

In addition, we consider the effect of credit spread movements on the market value of our fixed maturities, fixed maturities pledged under securities lending agreements, short-term investments and certain of our other investments and investment funds accounted for using the equity method which invest in fixed income securities and the corresponding change in unrealized appreciation. As credit spreads widen, the market value of our fixed income securities falls, and the converse is also true.

The following table summarizes the effect that an immediate, parallel shift in credit spreads in a static interest rate environment would have had on the portfolio at December 31, 2009:

(U.S. dollars in millions)	Credit Spread Shift in Basis Points				
	-100	-50	0	50	100
December 31, 2009:					
Total market value	\$ 11,198.4	\$ 11,061.6	\$ 10,920.7	\$ 10,775.8	\$ 10,627.8
Market value change from base	2.54%	1.29%		(1.33)%	(2.68)%
Change in unrealized value	\$ 277.7	\$ 140.9		\$ (144.9)	\$ (292.9)
December 31, 2008:					
Total market value	\$ 9,850.0	\$ 9,745.8	\$ 9,641.7	\$ 9,537.6	\$ 9,433.4
Market value change from base	2.16%	1.08%		(1.08)%	(2.16)%
Change in unrealized value	\$ 208.3	\$ 104.1		\$ (104.1)	\$ (208.3)

Another method that attempts to measure portfolio risk is Value-at-Risk ("VaR"). VaR attempts to take into account a broad cross-section of risks facing a portfolio by utilizing relevant securities volatility data skewed towards the most recent months and quarters. VaR measures the amount of a portfolio at risk for outcomes 1.65 standard deviations from the mean based on normal market conditions over a one year time horizon and is expressed as a percentage of the portfolio's initial value. In other words, 95% of the time, should the risks taken into account in the VaR model perform per their historical tendencies, the portfolio's loss in any one year period is expected to be less than or equal to the calculated VaR, stated as a percentage of the measured portfolio's initial value. As of December 31, 2009, our portfolio's VaR was estimated to be 4.79%, compared to an estimated 8.49% at December 31, 2008.

Privately Held Securities and Equity Securities. Our investment portfolio includes an allocation to privately held securities and equity securities. At December 31, 2009 and 2008, the market value of our investments in privately held securities and equity securities (excluding our investment in Aeolus LP which is accounted for using the equity method) totaled \$44.5 million and \$8.8 million, respectively. These securities are exposed to price risk, which is the potential loss arising from decreases in market value. An immediate hypothetical 10% depreciation in the value of each position would reduce the

Table of Contents

market value of such investments by approximately \$4.5 million and \$0.9 million at December 31 2009 and 2008, respectively, and would have decreased book value per common share by approximately \$0.08 and \$0.01, respectively.

Investment-Related Derivatives. Derivative instruments may be used to enhance investment performance, replicate investment positions or manage market exposures and duration risk that would be allowed under our investment guidelines if implemented in other ways. The market values of those derivatives are based on quoted market prices. See note 9, "Derivative Instruments," of the notes accompanying our consolidated financial Statements for additional disclosures concerning derivatives. At December 31, 2009, the notional value of the net long position of derivative instruments (excluding to-be-announced mortgage backed securities which are included in the fixed income securities analysis above and foreign currency forward contracts which are included in the foreign currency exchange risk analysis below) was \$1.13 billion, compared to \$919.6 million at December 31, 2008. A 100 basis point depreciation of the underlying exposure to these derivative instruments at December 31, 2009 and 2008 would have resulted in a reduction in net income of approximately \$11.3 million and \$9.2 million, respectively, and would have decreased book value per common share by \$0.21 and \$0.15, respectively.

Foreign Currency Exchange Risk

Foreign currency rate risk is the potential change in value, income and cash flow arising from adverse changes in foreign currency exchange rates. Through our subsidiaries and branches located in various foreign countries, we conduct our insurance and reinsurance operations in a variety of local currencies other than the U.S. Dollar. We generally hold investments in foreign currencies which are intended to mitigate our exposure to foreign currency fluctuations in our net insurance liabilities. We may also utilize foreign currency forward contracts and currency options as part of our investment strategy. In addition, as a result of the current financial and economic environment as well as the potential for additional investment returns, we may not match a portion of our projected liabilities in foreign currencies with investments in the same currencies, which would increase our exposure to foreign currency fluctuations and increase the volatility in our results of operations. A 10% appreciation of the U.S. Dollar against the major foreign currencies for our outstanding contracts at December 31, 2009 and 2008, net of unrealized depreciation on our securities denominated in currencies other than the U.S. Dollar, would have resulted in unrealized losses of approximately \$40.1 million and \$20.0 million, respectively, and would have decreased book value per common share by approximately \$0.73 and \$0.33, respectively. Historical observations indicate a low probability that all foreign currency exchange rates would shift against the U.S. Dollar in the same direction and at the same time and, accordingly, the actual effect of foreign currency rate movements may differ materially from the amounts set forth above. For further discussion on foreign exchange activity, please refer to " Results of Operations."

Effects of Inflation

We do not believe that inflation has had a material effect on our consolidated results of operations, except insofar as inflation may affect our reserves for losses and loss adjustment expenses and interest rates. The potential exists, after a catastrophe loss, for the development of inflationary pressures in a local economy. The anticipated effects of inflation on us are considered in our catastrophe loss models. The actual effects of inflation on our results cannot be accurately known until claims are ultimately settled.

Table of Contents

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Reference is made to the information appearing above under the subheading "Market Sensitive Instruments and Risk Management" under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operation," which information is hereby incorporated by reference.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See our consolidated financial statements and notes thereto and required financial statement schedules commencing on page F-1.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

In connection with the filing of this Form 10-K, our management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation, as of December 31, 2009, for the purposes set forth in the applicable rules under the Securities and Exchange Act of 1934, as amended (the "Exchange Act"). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the disclosure controls and procedures are effective.

We continue to enhance our operating procedures and internal controls (including the timely and successful implementation of our information technology initiatives, which include the implementation of improved computerized systems and programs to replace and support manual systems, and including controls over financial reporting) to effectively support our business and our regulatory and reporting requirements. Our management does not expect that our disclosure controls or our internal controls will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. As a result of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons or by collusion of two or more people. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. As a result of the inherent limitations in a cost-effective control system, misstatement due to error or fraud may occur and not be detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the disclosure controls and procedures are met.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2009. In making this assessment, management used the criteria set forth by the

Table of Contents

Committee of Sponsoring Organizations (COSO) of the Treadway Commission in *Internal Control-Integrated Framework*.

Based on our assessment, management determined that, as of December 31, 2009, our internal control over financial reporting was effective. The effectiveness of our internal control over financial reporting as of December 31, 2009 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears on page F-2.

Changes in Internal Controls Over Financial Reporting

There have been no changes in internal control over financial reporting that occurred in connection with our evaluation required pursuant to Rules 13a-15 and 15d-15 under the Exchange Act during the fiscal quarter ended December 31, 2009 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference from the information to be included in our definitive proxy statement ("Proxy Statement") for our annual meeting of shareholders to be held in 2010, which we intend to file with the SEC pursuant to Regulation 14A. Copies of our code of ethics applicable to our chief executive officer, chief financial officer and principal accounting officer or controller are available free of charge to investors upon written request addressed to the attention of ACGL's corporate secretary, Wessex House, 45 Reid Street, Hamilton HM 12, Bermuda. In addition, our code of ethics and certain other basic corporate documents, including the charters of our audit committee, compensation committee and nominating committee are posted on our website. If any substantive amendments are made to the code of ethics or if there is a grant of a waiver, including any implicit waiver, we will disclose the nature of such amendment or waiver on our website or in a report on Form 8-K, to the extent required by applicable law or the rules and regulations of any exchange applicable to us. Our website address is intended to be an inactive, textual reference only and none of the material on our website is incorporated by reference into this report.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference from the information to be included in the Proxy Statement to be filed pursuant to Regulation 14A with the SEC before April 30, 2010, which Proxy Statement is incorporated by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Other than the information set forth below, the information required by this item is incorporated by reference from the information to be included in the Proxy Statement to be filed pursuant to Regulation 14A with the SEC before April 30, 2010, which Proxy Statement is incorporated by reference.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

In October 2001, we adopted the Long Term Incentive Plan for New Employees ("New Employee Plan") to provide incentives to attract and motivate new hires in connection with the launch of our

Table of Contents

underwriting initiative. A total of 3,634,170 of such share awards were granted under the New Employee Plan. The New Employee Plan was not approved by our shareholders and was subsequently terminated in 2002, although a total of 1,263,380 share awards remain outstanding under the New Employee Plan as of December 31, 2009. For information about our equity compensation plans, see note 15, "Share Capital," of the notes accompanying our consolidated financial statements.

The following information is as of December 31, 2009:

Plan category	Number of securities to be issued upon exercise of outstanding options (warrants and rights) (a)	Weighted-average exercise price of outstanding options (warrants and rights) (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	4,013,736	\$ 40.56	2,085,343
Equity compensation plans not approved by security holders	1,263,380	\$ 22.11	
Total	5,277,116	\$ 36.14	2,085,343

(1) Includes all vested and unvested options outstanding of 5,016,104 and restricted stock units outstanding of 261,012.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference from the information to be included in the Proxy Statement to be filed pursuant to Regulation 14A with the SEC before April 30, 2010, which Proxy Statement is incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated by reference from the information to be included in our Proxy Statement to be filed pursuant to Regulation 14A with the SEC before April 30, 2010, which Proxy Statement is incorporated by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

FINANCIAL STATEMENT SCHEDULES

Financial statement schedules listed in the accompanying index to our financial statements schedules on page F-1 are filed as part of this report, and are included in Item 8.

EXHIBITS

The exhibits listed in the accompanying exhibit index on page E-1 are filed as part of this report.

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ARCH CAPITAL GROUP LTD.

(Registrant)

By: /s/ CONSTANTINE IORDANOU

Name: Constantine Iordanou

Title: *Chairman of the Board of Directors, President & Chief Executive Officer*

February 26, 2010

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Name	Title	Date
<u>/s/ CONSTANTINE IORDANOU</u> Constantine Iordanou	Chairman of the Board of Directors, President and Chief Executive Officer (Principal Executive Officer)	February 26, 2010
<u>/s/ JOHN C.R. HELE</u> John C.R. Hele	Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial and Principal Accounting Officer)	February 26, 2010
* <u>Wolfe "Bill" H. Bragin</u>	Director	February 26, 2010
* <u>John L. Bunce, Jr.</u>	Director	February 26, 2010
* <u>Sean D. Carney</u>	Director	February 26, 2010
* <u>Kewsong Lee</u>	Director	February 26, 2010

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

Name	Title	Date
*		
_____ James J. Meenaghan	Director	February 26, 2010
*		
_____ John M. Pasquesi	Director	February 26, 2010
*		
_____ John D. Vollaro	Director	February 26, 2010
*		
_____ Robert F. Works	Director	February 26, 2010

* By John C.R. Hele, as attorney-in-fact and agent, pursuant to a power of attorney, a copy of which has been filed with the Securities and Exchange Commission as Exhibit 24 to this report.

/s/ JOHN C.R. HELE

Name: John C.R. Hele
Attorney-in-Fact

Table of Contents

INDEX TO FINANCIAL STATEMENTS AND SCHEDULES

	Pages
Arch Capital Group Ltd. and Subsidiaries	
<u>Report of Independent Registered Public Accounting Firm</u>	<u>F-2</u>
<u>Consolidated Balance Sheets at December 31, 2009 and 2008</u>	<u>F-3</u>
<u>Consolidated Statements of Income for the years ended December 31, 2009, 2008 and 2007</u>	<u>F-4</u>
<u>Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2008, 2008 and 2007</u>	<u>F-5</u>
<u>Consolidated Statements of Comprehensive Income for the years ended December 31, 2009, 2008 and 2007</u>	<u>F-6</u>
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2009, 2008 and 2007</u>	<u>F-7</u>
<u>Notes to Consolidated Financial Statements</u>	<u>F-8</u>
Schedules	
<u>I. Summary of Investments Other Than Investments in Related Parties at December 31, 2009</u>	<u>S-1</u>
<u>II. Condensed Financial Information of Registrant</u>	<u>S-2</u>
<u>III. Supplementary Insurance Information for the years ended December 31, 2009, 2008 and 2007</u>	<u>S-5</u>
<u>IV. Reinsurance for the years ended December 31, 2009, 2008 and 2007</u>	<u>S-6</u>
<u>V. Supplementary Information for Property and Casualty Underwriters</u>	<u>S-7</u>

Schedules other than those listed above are omitted for the reason that they are not applicable.

Table of Contents

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Arch Capital Group Ltd.:

In our opinion, the consolidated financial statements listed in the accompanying index, present fairly, in all material respects, the financial position of Arch Capital Group Ltd. and its subsidiaries (the "Company") at December 31, 2009 and December 31, 2008, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2009 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedules listed in the accompanying index present fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedules, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedules, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for other-than-temporary impairment losses in 2009.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP
New York, New York
February 26, 2010

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(U.S. dollars in thousands, except share data)

	December 31,	
	2009	2008
Assets		
Investments:		
Fixed maturities available for sale, at market value (amortized cost: 2009, \$9,227,432; 2008, \$8,314,615)	\$ 9,391,926	\$ 8,122,221
Short-term investments available for sale, at market value (amortized cost: 2009, \$570,469; 2008, \$478,088)	571,489	479,586
Investment of funds received under securities lending agreements, at market value (amortized cost: 2009, \$96,590; 2008, \$493,902)	91,160	473,766
TALF investments, at market value	250,265	
Other investments (cost: 2009, \$162,505; 2008, \$125,858)	172,172	109,601
Investment funds accounted for using the equity method	391,869	301,027
Total investments	10,868,881	9,486,201
Cash	334,571	251,739
Accrued investment income	70,673	78,052
Investment in joint venture (cost: \$100,000)	102,855	98,341
Fixed maturities and short-term investments pledged under securities lending agreements, at market value	212,820	728,065
Securities purchased under agreements to resell using funds received under securities lending agreements	115,839	256,428
Premiums receivable	595,030	628,951
Unpaid losses and loss adjustment expenses recoverable	1,659,500	1,729,135
Paid losses and loss adjustment expenses recoverable	60,770	63,294
Prepaid reinsurance premiums	277,985	303,707
Deferred acquisition costs, net	280,372	295,192
Receivable for securities sold	187,171	105,073
Other assets	609,323	592,367
Total Assets	\$ 15,375,790	\$ 14,616,545
Liabilities		
Reserve for losses and loss adjustment expenses	\$ 7,873,412	\$ 7,666,957
Unearned premiums	1,433,331	1,526,682
Reinsurance balances payable	156,500	138,509
Senior notes	300,000	300,000
Revolving credit agreement borrowings	100,000	100,000
TALF borrowings, at market value	217,565	
Securities lending payable	219,116	753,528
Payable for securities purchased	136,381	123,309
Other liabilities	616,136	574,595
Total Liabilities	11,052,441	11,183,580
Commitments and Contingencies		
Shareholders' Equity		
Non-cumulative preferred shares (\$0.01 par value, 50,000,000 shares authorized, issued: 13,000,000)	130	130
Common shares (\$0.01 par value, 200,000,000 shares authorized, issued: 2009, 54,761,678; 2008, 60,511,974)	548	605
Additional paid-in capital	578,336	994,585
Retained earnings	3,605,809	2,693,239

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Accumulated other comprehensive income (loss), net of deferred income tax	138,526	(255,594)
Total Shareholders' Equity	4,323,349	3,432,965
Total Liabilities and Shareholders' Equity	\$ 15,375,790	\$ 14,616,545

See Notes to Consolidated Financial Statements

F-3

[Table of Contents](#)

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME

(U.S. dollars in thousands, except share data)

	Years Ended December 31,		
	2009	2008	2007
Revenues			
Net premiums written	\$ 2,763,112	\$ 2,805,726	\$ 2,901,936
Decrease in unearned premiums	79,633	39,728	42,714
Net premiums earned	2,842,745	2,845,454	2,944,650
Net investment income	390,131	468,080	463,241
Net realized gains (losses)	143,582	(3,939)	58,338
Other-than-temporary impairment losses	(147,509)	(181,162)	(30,197)
Less investment impairments recognized in other comprehensive income, before taxes	81,376		
Net impairment losses recognized in earnings	(66,133)	(181,162)	(30,197)
Fee income	3,462	4,706	7,536
Equity in net income (loss) of investment funds accounted for using the equity method	167,819	(178,608)	(171)
Other income	20,016	12,282	9,048
Total revenues	3,501,622	2,966,813	3,452,445
Expenses			
Losses and loss adjustment expenses	1,654,674	1,848,744	1,644,170
Acquisition expenses	493,560	490,509	480,531
Other operating expenses	392,138	395,802	388,138
Interest expense	24,440	23,838	22,093
Net foreign exchange (gains) losses	39,157	(96,585)	43,969
Total expenses	2,603,969	2,662,308	2,578,901
Income before income taxes	897,653	304,505	873,544
Income taxes:			
Current tax expense	23,612	23,160	21,002
Deferred tax benefit	(2,904)	(9,621)	(5,401)
Income tax expense	20,708	13,539	15,601
Net income	876,945	290,966	857,943
Preferred dividends	25,844	25,844	25,844
Net income available to common shareholders	\$ 851,101	\$ 265,122	\$ 832,099
Net income per common share data			
Basic	\$ 14.29	\$ 4.27	\$ 11.72
Diluted	\$ 13.74	\$ 4.09	\$ 11.28
Weighted average common shares and common share equivalents outstanding			
Basic	59,560,361	62,101,203	70,995,672
Diluted	61,927,132	64,789,052	73,762,419

See Notes to Consolidated Financial Statements

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(U.S. dollars in thousands)

	Years Ended December 31,		
	2009	2008	2007
Non-Cumulative Preferred Shares			
Balance at beginning and end of year	\$ 130	\$ 130	\$ 130
Common Shares			
Balance at beginning of year	605	673	743
Common shares issued, net	10	6	8
Purchases of common shares under share repurchase program	(67)	(74)	(78)
Balance at end of year	548	605	673
Additional Paid-in Capital			
Balance at beginning of year	994,585	1,451,667	1,944,304
Common shares issued	3,730	4,507	2,577
Exercise of stock options	16,518	23,812	18,599
Common shares retired	(463,486)	(515,325)	(539,384)
Amortization of share-based compensation	27,042	30,277	24,605
Other	(53)	(353)	966
Balance at end of year	578,336	994,585	1,451,667
Retained Earnings			
Balance at beginning of year	2,693,239	2,428,117	1,593,907
Cumulative effect of change in accounting principle (1)	61,469		2,111
Balance at beginning of year, as adjusted	2,754,708	2,428,117	1,596,018
Dividends declared on preferred shares	(25,844)	(25,844)	(25,844)
Net income	876,945	290,966	857,943
Balance at end of year	3,605,809	2,693,239	2,428,117
Accumulated Other Comprehensive Income (Loss)			
Balance at beginning of year	(255,594)	155,224	51,535
Cumulative effect of change in accounting principle (1)	(61,469)		(2,111)
Balance at beginning of year, as adjusted	(317,063)	155,224	49,424
Change in unrealized appreciation (decline) in value of investments, net of deferred income tax	525,606	(375,278)	92,657
Portion of other-than-temporary impairment losses recognized in other comprehensive income, net of deferred income tax	(81,376)		
Foreign currency translation adjustments, net of deferred income tax	11,359	(35,540)	13,143
Balance at end of year	138,526	(255,594)	155,224
Total Shareholders' Equity	\$ 4,323,349	\$ 3,432,965	\$ 4,035,811

(1)

2009 reflects the adoption of accounting guidance regarding the recognition and presentation of other-than-temporary impairments, while 2007 reflects the adoption of accounting guidance regarding certain hybrid financial instruments.

See Notes to Consolidated Financial Statements

F-5

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(U.S. dollars in thousands)

	Years Ended December 31,		
	2009	2008	2007
Comprehensive Income (Loss)			
Net income	\$ 876,945	\$ 290,966	\$ 857,943
Other comprehensive income (loss), net of deferred income tax			
Unrealized appreciation (decline) in value of investments:			
Unrealized holding gains (losses) arising during year	574,184	(582,243)	134,783
Portion of other-than-temporary impairment losses recognized in other comprehensive income, net of deferred income tax	(81,376)		
Reclassification of net realized (gains) losses, net of income taxes, included in net income	(48,578)	206,965	(42,126)
Foreign currency translation adjustments	11,359	(35,540)	13,143
Other comprehensive income (loss)	455,589	(410,818)	105,800
Comprehensive Income (Loss)	\$ 1,332,534	\$ (119,852)	\$ 963,743

See Notes to Consolidated Financial Statements

F-6

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(U.S. dollars in thousands)

	Years Ended December 31,		
	2009	2008	2007
Operating Activities			
Net income	\$ 876,945	\$ 290,966	\$ 857,943
Adjustments to reconcile net income to net cash provided by operating activities:			
Net realized (gains) losses	(123,841)	8,752	(58,109)
Net impairment losses recognized in earnings	66,133	181,162	30,197
Equity in net (income) loss of investment funds accounted for using the equity method and other income	(183,038)	166,610	(8,877)
Share-based compensation	27,042	30,277	24,605
Changes in:			
Reserve for losses and loss adjustment expenses, net of unpaid losses and loss adjustment expenses recoverable	219,607	658,501	569,490
Unearned premiums, net of prepaid reinsurance premiums	(79,842)	(42,029)	(36,775)
Premiums receivable	44,438	8,031	24,414
Deferred acquisition costs, net	17,572	(9,626)	997
Reinsurance balances payable	15,913	(153,882)	(3,933)
Other liabilities	(24,297)	(81,353)	25,961
Other items, net	136,015	81,689	10,543
Net Cash Provided By Operating Activities	992,647	1,139,098	1,436,456
Investing Activities			
Purchases of:			
Fixed maturity investments	(21,270,266)	(17,407,841)	(20,485,004)
Other investments	(260,947)	(480,417)	(542,615)
Proceeds from the sales of:			
Fixed maturity investments	19,777,948	16,171,374	18,949,502
Other investments	303,888	460,178	204,026
Proceeds from redemptions and maturities of fixed maturity investments	785,118	582,346	644,047
Net sales of short-term investments	19,570	92,053	285,310
Change in investment of securities lending collateral	534,412	750,195	(612,347)
Investment in joint venture		(100,000)	
Purchases of furniture, equipment and other assets	(19,483)	(9,501)	(27,996)
Net Cash Provided By (Used For) Investing Activities	(129,760)	58,387	(1,585,077)
Financing Activities			
Purchases of common shares under share repurchase program	(458,402)	(513,130)	(537,066)
Proceeds from common shares issued, net	9,966	21,881	13,498
Revolving credit agreement borrowings		100,000	
Proceeds from TALF borrowings	219,843		
Repayments of TALF borrowings	(1,103)		
Change in securities lending collateral	(534,412)	(750,195)	612,347
Other	4,355	2,476	4,923
Preferred dividends paid	(25,844)	(25,844)	(25,844)
Net Cash Provided By (Used For) Financing Activities	(785,597)	(1,164,812)	67,858

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Effects of exchange rate changes on foreign currency cash	5,542	(20,849)	3,661
Increase (decrease) in cash	82,832	11,824	(77,102)
Cash beginning of year	251,739	239,915	317,017
Cash end of year	\$ 334,571	\$ 251,739	\$ 239,915

See Notes to Consolidated Financial Statements

F-7

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

1. Organization

Arch Capital Group Ltd. ("ACGL") is a Bermuda public limited liability company which provides insurance and reinsurance on a worldwide basis through its wholly owned subsidiaries.

ACGL was formed in September 2000 and became the sole shareholder of Arch Capital Group (U.S.) Inc. ("Arch-U.S.") pursuant to an internal reorganization transaction completed in November 2000, as described below. Arch-U.S. is a Delaware company formed in March 1995 under the original name of "Risk Capital Holdings, Inc." Prior to May 5, 2000, Arch-U.S. provided reinsurance and other forms of capital for insurance companies through its wholly owned subsidiary, Arch Reinsurance Company ("Arch Re U.S."), a Nebraska corporation formed in 1995 under the original name of "Risk Capital Reinsurance Company."

On May 5, 2000, Arch-U.S. sold the prior reinsurance operations of Arch Re U.S. to White Mountains Reinsurance Company of America ("WTM Re"), formerly known as Folksamerica Reinsurance Company, in an asset sale, but retained its surplus and U.S.-licensed reinsurance platform. The WTM Re transaction was structured as a transfer and assumption agreement (and not reinsurance) and, accordingly, the loss reserves (and any related reinsurance recoverables) related to the transferred business are not included in the Company's balance sheet. However, in the event that WTM Re refuses or is unable to make payment of claims on the reinsurance business assumed by it in the May 2000 sale and the notice given to reinsureds is found not to be an effective release by such reinsureds, Arch Re U.S. would be liable for such claims (see Note 13). On November 8, 2000, following the approval of Arch-U.S.'s shareholders, Arch-U.S. completed an internal reorganization that resulted in Arch-U.S. becoming a wholly owned subsidiary of ACGL.

In October 2001, the Company launched an underwriting initiative to meet current and future demand in the global insurance and reinsurance markets that included the recruitment of new management teams and an equity capital infusion of \$763.2 million.

As used herein, the "Company" means ACGL and its subsidiaries, except when referring to periods prior to November 8, 2000, when it means Arch-U.S. and its subsidiaries. Similarly, "Common Shares" means the common shares, par value \$0.01, of ACGL, except when referring to periods prior to November 8, 2000, when it means the common stock of Arch-U.S.

2. Significant Accounting Policies

(a) Basis of Presentation

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of ACGL, Arch Reinsurance Ltd. ("Arch Re Bermuda"), Arch Re U.S., Arch-U.S., Arch Insurance Company, Arch Specialty Insurance Company, Arch Excess & Surplus Insurance Company, Arch Indemnity Insurance Company, Arch Risk Transfer Services Ltd., Arch Reinsurance Europe Underwriting Limited ("Arch Re Europe"), Arch Insurance Company (Europe) Limited ("Arch Insurance Company Europe") and Lloyd's of London syndicate 2012 and related companies ("Arch Syndicate 2012"). All significant intercompany transactions and balances have been eliminated in consolidation. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates and assumptions.

The Company has reclassified the presentation of certain prior year information to conform to the current presentation. Such reclassifications had no effect on the Company's net income, shareholders'

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

equity or cash flows. Tabular amounts are in U.S. Dollars in thousands, except share amounts, unless otherwise noted.

(b) Premium Revenues and Related Expenses

Insurance premiums written are generally recorded at the policy inception and are primarily earned on a pro rata basis over the terms of the policies for all products, usually 12 months. Premiums written include estimates in the Company's programs, specialty lines, collateral protection business and for participation in involuntary pools. Such premium estimates are derived from multiple sources which include the historical experience of the underlying business, similar business and available industry information. Unearned premium reserves represent the portion of premiums written that relates to the unexpired terms of in-force insurance policies.

Reinsurance premiums written include amounts reported by brokers and ceding companies, supplemented by the Company's own estimates of premiums where reports have not been received. The determination of premium estimates requires a review of the Company's experience with the ceding companies, familiarity with each market, the timing of the reported information, an analysis and understanding of the characteristics of each line of business, and management's judgment of the impact of various factors, including premium or loss trends, on the volume of business written and ceded to the Company. On an ongoing basis, the Company's underwriters review the amounts reported by these third parties for reasonableness based on their experience and knowledge of the subject class of business, taking into account the Company's historical experience with the brokers or ceding companies. In addition, reinsurance contracts under which the Company assumes business generally contain specific provisions which allow the Company to perform audits of the ceding company to ensure compliance with the terms and conditions of the contract, including accurate and timely reporting of information. Based on a review of all available information, management establishes premium estimates where reports have not been received. Premium estimates are updated when new information is received and differences between such estimates and actual amounts are recorded in the period in which estimates are changed or the actual amounts are determined.

Premiums written are recorded based on the type of contracts the Company writes. Premiums on the Company's excess of loss and pro rata reinsurance contracts are estimated when the business is underwritten. For excess of loss contracts, the minimum premium, as defined in the contract, is generally recorded as an estimate of premiums written as of the inception date of the treaty. Estimates of premiums written under pro rata contracts are recorded in the period in which the underlying risks are expected to incept and are based on information provided by the brokers and the ceding companies. For multi-year reinsurance treaties which are payable in annual installments, generally, only the initial annual installment is included as premiums written at policy inception due to the ability of the reinsured to commute or cancel coverage during the term of the policy. The remaining annual installments are included as premiums written at each successive anniversary date within the multi-year term.

Reinstatement premiums for the Company's insurance and reinsurance operations are recognized at the time a loss event occurs, where coverage limits for the remaining life of the contract are reinstated under pre-defined contract terms. Reinstatement premiums, if obligatory, are fully earned when recognized. The accrual of reinstatement premiums is based on an estimate of losses and loss adjustment expenses, which reflects management's judgment.

Premium estimates are reviewed by management at least quarterly. Such review includes a comparison of actual reported premiums to expected ultimate premiums along with a review of the aging and collection of premium estimates. Based on management's review, the appropriateness of the

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

premium estimates is evaluated, and any adjustment to these estimates is recorded in the period in which it becomes known. Adjustments to premium estimates could be material and such adjustments could directly and significantly impact earnings favorably or unfavorably in the period they are determined because the estimated premium may be fully or substantially earned. A significant portion of amounts included as premiums receivable, which represent estimated premiums written, net of commissions, are not currently due based on the terms of the underlying contracts.

Reinsurance premiums assumed, irrespective of the class of business, are generally earned on a pro rata basis over the terms of the underlying policies or reinsurance contracts. Contracts and policies written on a "losses occurring" basis cover claims that may occur during the term of the contract or policy, which is typically 12 months. Accordingly, the premium is earned evenly over the term. Contracts which are written on a "risks attaching" basis cover claims which attach to the underlying insurance policies written during the terms of such contracts. Premiums earned on such contracts usually extend beyond the original term of the reinsurance contract, typically resulting in recognition of premiums earned over a 24-month period.

Certain of the Company's reinsurance contracts include provisions that adjust premiums or acquisition expenses based upon the experience under the contracts. Premiums written and earned, as well as related acquisition expenses, are recorded based upon the projected experience under such contracts.

The Company also writes certain business that is intended to provide insurers with risk management solutions that complement traditional reinsurance. Under these contracts, the Company assumes a measured amount of insurance risk in exchange for an anticipated margin, which is typically lower than on traditional reinsurance contracts. The terms and conditions of these contracts may include additional or return premiums based on loss experience, loss corridors, sublimits and caps. Examples of such business include aggregate stop-loss coverages, financial quota share coverages and multi-year retrospectively rated excess of loss coverages. If these contracts are deemed to transfer risk, they are accounted for as reinsurance.

Acquisition expenses and other expenses that vary with, and are directly related to, the acquisition of business related to the Company's underwriting operations are deferred and amortized over the period in which the related premiums are earned. Acquisition expenses, net of ceding commissions received from unaffiliated reinsurers, consist principally of commissions, brokerage and taxes paid to obtain the Company's business. Other operating expenses also include expenses that vary with, and are directly related to, the acquisition of business. Deferred acquisition costs, which are based on the related unearned premiums, are carried at their estimated realizable value and take into account anticipated losses and loss adjustment expenses, based on historical and current experience, and anticipated investment income. A premium deficiency occurs if the sum of anticipated losses and loss adjustment expenses, unamortized acquisition costs and maintenance costs and anticipated investment income exceed unearned premiums. A premium deficiency is recorded by charging any unamortized acquisition costs to expense to the extent required in order to eliminate the deficiency. If the premium deficiency exceeds unamortized acquisition costs then a liability is accrued for the excess deficiency. No significant premium deficiency charges were recorded by the Company during 2009, 2008 or 2007.

(c) Deposit Accounting

Certain assumed reinsurance contracts, which pursuant to Financial Accounting Standards Board ("FASB") guidance regarding the accounting and reporting for reinsurance and short-duration and long-duration contracts, are deemed not to transfer insurance risk, are accounted for using the deposit method of accounting as prescribed in the FASB guidance regarding the accounting for insurance and

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

reinsurance contracts that do not transfer insurance risk. However, it is possible that the Company could incur financial losses on such contracts. Management exercises significant judgment in the assumptions used in determining whether assumed contracts should be accounted for as reinsurance contracts or deposit insurance contracts. Under the FASB guidance, for those contracts that contain an element of underwriting risk, the estimated profit margin is deferred and amortized over the contract period and such amount is included in the Company's underwriting results. When the estimated profit margin is explicit, the margin is reflected as fee income and any adverse financial results on such contracts are reflected as incurred losses. When the estimated profit margin is implicit, the margin is reflected as an offset to paid losses and any adverse financial results on such contracts are reflected as incurred losses. For those contracts that do not transfer an element of underwriting risk, the projected profit is reflected in earnings over the estimated settlement period using the interest method and such profit is included in investment income. Additional judgments are required when applying the accounting guidance with respect to the revenue recognition criteria for contracts deemed not to transfer insurance risk. Deposit accounting liabilities, which totaled \$38.2 million and \$39.8 million, respectively, at December 31, 2009 and 2008, are included in "Other liabilities" on the Company's balance sheet.

(d) Retroactive Accounting

Retroactive reinsurance reimburses a ceding company for liabilities incurred as a result of past insurable events covered by the underlying policies reinsured. In certain instances, reinsurance contracts cover losses both on a prospective basis and on a retroactive basis and, accordingly, the Company bifurcates the prospective and retrospective elements of these reinsurance contracts and accounts for each element separately. Underwriting income generated in connection with retroactive reinsurance contracts is deferred and amortized into income over the settlement period while losses are charged to income immediately. Subsequent changes in estimated or actual cash flows under such retroactive reinsurance contracts are accounted for by adjusting the previously deferred amount to the balance that would have existed had the revised estimate been available at the inception of the reinsurance transaction, with a corresponding charge or credit to income.

(e) Reinsurance Ceded

In the normal course of business, the Company purchases reinsurance to increase capacity and to limit the impact of individual losses and events on its underwriting results by reinsuring certain levels of risk with other insurance enterprises or reinsurers. The Company uses pro rata, excess of loss and facultative reinsurance contracts. Reinsurance ceding commissions are recognized as income on a pro rata basis over the period of risk. The portion of such commissions that will be earned in the future is deferred and reported as a reduction to acquisition costs. The accompanying consolidated statement of income reflects premiums and losses and loss adjustment expenses and acquisition costs, net of reinsurance ceded (see Note 4). Ceded unearned premiums are reported as prepaid reinsurance premiums and estimated amounts of reinsurance recoverable on unpaid losses are reported as unpaid losses and loss adjustment expenses recoverable. Reinsurance premiums ceded and unpaid losses and loss adjustment expenses recoverable are estimated in a manner consistent with that of the original policies issued and the terms of the reinsurance contracts. To the extent that any reinsurer does not meet its obligations under reinsurance agreements, the Company must discharge the liability.

(f) Cash

Cash includes cash equivalents, which are investments with original maturities of three months or less that are not managed by external or internal investment advisors.

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

(g) Investments

The Company currently classifies all of its fixed maturity investments and short-term investments as "available for sale" and, accordingly, they are carried at estimated market value. The market value of fixed maturity securities is generally determined from quotations received from nationally recognized pricing services, or when such prices are not available, by reference to broker or underwriter bid indications. Short-term investments comprise securities due to mature within one year of the date of issue. Short-term investments include certain cash equivalents which are part of investment portfolios under the management of external and internal investment managers.

The Company participates in a securities lending program as a mechanism for generating additional interest income on its fixed income portfolio. Under the security lending agreements, certain of its fixed income portfolio securities are loaned to third parties, primarily major brokerage firms, for short periods of time through a lending agent. Such securities have been reclassified as "Fixed maturities and short-term investments pledged under securities lending agreements, at market value." The Company maintains legal control over the securities it lends, retains the earnings and cash flows associated with the loaned securities and receives a fee from the borrower for the temporary use of the securities. Collateral received, primarily in the form of cash, is required at a rate of 102% of the market value of the loaned securities (or 105% of the market value of the loaned securities when the collateral and loaned securities are denominated in non-U.S. currencies) including accrued investment income and is monitored and maintained by the lending agent. Such collateral is reinvested and is reflected as "Investment of funds received under securities lending agreements, at market value" and "Securities purchased under agreements to resell using funds received under securities lending agreements."

During 2009, the Company purchased asset-backed and commercial mortgage-backed securities under the Federal Reserve Bank of New York's ("FRBNY") Term Asset-Backed Securities Loan Facility ("TALF") program. TALF provides secured financing for asset-backed securities backed by certain types of consumer and small business loans and for legacy commercial mortgage-backed securities. TALF financing is non-recourse to the Company, except in certain limited instances, and is collateralized by the purchased securities and provides financing for the purchase price of the securities, less a 'haircut' that varies based on the type of collateral. The Company can deliver the collateralized securities to a special purpose vehicle created by FRBNY in full defeasance of the borrowing. The Company elected to carry the securities and related borrowings at fair value under the fair value option afforded by accounting guidance regarding the fair value option for financial assets and financial liabilities. The securities purchased under TALF are reflected as "TALF investments, at market value" and the secured financing from the FRBNY is reflected as "TALF borrowings, at market value." Changes in market value for both the securities and borrowings are included in "Net realized gains (losses)," while interest income on the TALF investments is reflected in net investment income and interest expense on the TALF borrowings is reflected in interest expense.

The Company's investment portfolio includes certain funds that invest in fixed maturity securities which, due to their ownership structure, are accounted for by the Company using the equity method. In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on the Company's proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). Such investments are generally recorded on a one month lag with some investments reported for on a three month lag based on the availability of reports from the investment funds. Changes in the carrying value of such investments are recorded in net income as "Equity in net income (loss) of investment funds accounted for using the equity method" while changes in the carrying value of the Company's other fixed income

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

investments are recorded as an unrealized gain or loss component of accumulated other comprehensive income in shareholders' equity. As such, fluctuations in the carrying value of the investment funds accounted for using the equity method may increase the volatility of the Company's reported results of operations.

Other investments include: (i) mutual funds which invest in fixed maturity securities and (ii) privately held securities and other which include the Company's investment in Aeolus LP (see Note 12) and an equity portfolio which was added in 2009. Investments in equity securities are carried at estimated market value in accordance with FASB guidance regarding the accounting for certain investments in debt and equity securities. The estimated market value of investments in privately held securities, other than those carried under the equity method, are initially valued based upon transaction price and then adjusted upwards or downwards from the transaction price to reflect expected exit values. The Company elected to carry the equity portfolio at fair value under the fair value option afforded by accounting guidance regarding the fair value option for financial assets and liabilities.

In April 2009, the FASB issued guidance regarding the recognition and presentation of other-than-temporary impairments, which requires entities to separate an other-than-temporary impairment ("OTTI") of a debt security into two components when there are credit related losses associated with the impaired debt security for which the Company asserts that it does not have the intent to sell the security, and it is more likely than not that it will not be required to sell the security before recovery of its cost basis. Prior to January 1, 2009, the Company had to determine whether it had the intent and ability to hold the investment for a sufficient period of time for the value to recover. The Company's process for identifying declines in the market value of investments that were considered other-than-temporary involved consideration of several factors. These factors included (i) an analysis of the liquidity, business prospects and overall financial condition of the issuer, (ii) the time period in which there was a significant decline in value, and (iii) the significance of the decline. When the analysis of such factors resulted in the Company's conclusion that declines in market values were other-than-temporary, the cost of the securities was written down to market value and the reduction in value was reflected as a realized loss. Effective under this guidance, the amount of the OTTI related to a credit loss is recognized in earnings, and the amount of the OTTI related to other factors (*e.g.*, interest rates, market conditions, etc.) is recorded as a component of other comprehensive income (loss). In instances where no credit loss exists but it is more likely than not that the Company will have to sell the debt security prior to the anticipated recovery, the decline in market value below amortized cost is recognized as an OTTI in earnings. In periods after the recognition of an OTTI on debt securities, the Company accounts for such securities as if they had been purchased on the measurement date of the OTTI at an amortized cost basis equal to the previous amortized cost basis less the OTTI recognized in earnings. For debt securities for which OTTI were recognized in earnings, the difference between the new amortized cost basis and the cash flows expected to be collected will be accreted or amortized into net investment income. This guidance was effective for periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. The Company elected to adopt this guidance effective for its interim period ended March 31, 2009.

Under FASB guidance regarding the accounting for derivative instruments and hedging activities, all derivative financial instruments, including embedded derivative instruments, are required to be recognized as either assets or liabilities in the consolidated balance sheets and measured at market value. The accounting for gains and losses associated with changes in the market value of a derivative and the effect on the consolidated financial statements depends on whether it has been designated and qualifies as part of a hedging relationship and whether the hedge is highly effective in achieving offsetting changes in the market value of the asset or liability hedged. The Company's investment strategy allows for the use of derivative instruments. Derivative instruments may be used to enhance

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

investment performance, replicate investment positions or manage market exposures and duration risk that would be allowed under the Company's investment guidelines if implemented in other ways. Pursuant to FASB guidance, these instruments, which have no hedging designation, are recognized as assets and liabilities in the Company's balance sheet at market value, based on quoted market prices, and all realized and unrealized contract gains and losses are included in net realized gains and losses in its results of operations.

Net investment income includes interest and dividend income together with amortization of market premiums and discounts and is net of investment management and custody fees. Anticipated prepayments and expected maturities are used in applying the interest method for certain investments such as mortgage and other asset-backed securities. When actual prepayments differ significantly from anticipated prepayments, the effective yield is recalculated to reflect actual payments to date and anticipated future payments. The net investment in such securities is adjusted to the amount that would have existed had the new effective yield been applied since the acquisition of the security. Such adjustments, if any, are included in net investment income when determined. Equity in net income (loss) of investment funds accounted for using the equity method includes changes in the market value of certain alternative investments accounted for under the equity method.

Investment gains or losses realized on the sale of investments are determined on a first-in, first-out basis and are reflected in net income. Unrealized appreciation or decline in the value of securities, which are carried at market value, is excluded from net income and recorded as a separate component of other comprehensive income, net of applicable deferred income tax.

(h) Reserves for Losses and Loss Adjustment Expenses

The reserve for losses and loss adjustment expenses consists of estimates of unpaid reported losses and loss adjustment expenses and estimates for losses incurred but not reported. The reserve for unpaid reported losses and loss adjustment expenses, established by management based on reports from ceding companies and claims from insureds, excludes estimates of amounts due from insureds related to losses under high deductible policies, and represents the estimated ultimate cost of events or conditions that have been reported to or specifically identified by the Company. Such reserves are supplemented by management's estimates of reserves for losses incurred for which reports or claims have not been received. Since the Company has limited historical experience upon which to base such estimates, the estimates are primarily determined based upon industry experience, information used in pricing contracts and policies and management's judgment. The Company's reserving method, to a large extent, has been the expected loss method, which is commonly applied when limited loss experience exists. The Company selects the initial expected loss and loss adjustment expense ratios based on information derived by its underwriters and actuaries during the initial pricing of the business, supplemented by industry data where appropriate. Such ratios consider, among other things, rate changes and changes in terms and conditions that have been observed in the market. These estimates are reviewed regularly and, as experience develops and new information becomes known, the reserves are adjusted as necessary. Such adjustments, if any, are reflected in income in the period in which they are determined. As actual loss information has been reported, the Company has developed its own loss experience and its reserving methods include other actuarial techniques. Over time, such techniques have been given further weight in its reserving process based on the continuing maturation of the Company's reserves. Inherent in the estimates of ultimate losses and loss adjustment expenses are expected trends in claims severity and frequency and other factors which may vary significantly as claims are settled. Accordingly, ultimate losses and loss adjustment expenses may differ materially from the amounts recorded in the accompanying consolidated financial statements. Losses and loss

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

adjustment expenses are recorded on an undiscounted basis, except for excess workers' compensation and employers' liability business written by the Company's insurance operations.

(i) Foreign Exchange

Assets and liabilities of foreign operations whose functional currency is not the U.S. Dollar are translated at the prevailing exchange rates at each balance sheet date. Revenues and expenses of such foreign operations are translated at average exchange rates during the year. The net effect of the translation adjustments for foreign operations, net of applicable deferred income taxes, is included in accumulated other comprehensive income. Monetary assets and liabilities, such as premiums receivable and the reserve for losses and loss adjustment expenses, denominated in foreign currencies are revalued at the exchange rate in effect at the balance sheet date with the resulting foreign exchange gains and losses included in net income. Accounts that are classified as non-monetary, such as deferred acquisition costs and the unearned premium reserves, are not revalued. In the case of foreign currency denominated fixed maturity securities which are classified as "available for sale," the change in exchange rates between the local currency and the Company's functional currency at each balance sheet date is included in unrealized appreciation or decline in value of securities, a component of accumulated other comprehensive income.

(j) Income Taxes

Deferred income taxes reflect the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and amounts used for income tax purposes. A valuation allowance is recorded if it is more likely than not that some or all of a deferred tax asset may not be realized. The Company considers future taxable income and feasible tax planning strategies in assessing the need for a valuation allowance. In the event the Company determines that it will not be able to realize all or part of its deferred income tax assets in the future, an adjustment to the deferred income tax assets would be charged to income in the period in which such determination is made. In addition, if the Company subsequently assesses that the valuation allowance is no longer needed, a benefit would be recorded to income in the period in which such determination is made.

The Company recognizes a tax benefit where it concludes that it is more likely than not that the tax benefit will be sustained on audit by the taxing authority based solely on the technical merits of the associated tax position. If the recognition threshold is met, the Company recognizes a tax benefit measured at the largest amount of the tax benefit that, in the Company's judgment, is greater than 50% likely to be realized. The Company records interest and penalties related to unrecognized tax benefits in the provision for income taxes.

(k) Earnings Per Common Share Data

The calculation of basic earnings per common share excludes dilutive securities and is computed by dividing income available to common shareholders by the weighted average number of Common Shares, including vested restricted shares, outstanding for the periods.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table sets forth the computation of basic and diluted earnings per common share:

	Years Ended December 31,		
	2009	2008	2007
Basic Earnings Per Common Share:			
Net income	\$876,945	\$290,966	\$857,943
Preferred dividends	(25,844)	(25,844)	(25,844)
Net income available to common shareholders (numerator)	\$851,101	\$265,122	\$832,099
Weighted average common shares and effect of dilutive common share equivalents used in the computation of earnings per common share:			
Weighted average common shares outstanding basic (denominator)	59,560,361	62,101,203	70,995,672
Effect of dilutive common share equivalents:			
Nonvested restricted shares	309,671	263,806	180,143
Stock options (1)	2,057,100	2,424,043	2,586,604
Weighted average common shares and common share equivalents outstanding diluted (denominator)	61,927,132	64,789,052	73,762,419
Earnings per common share:			
Basic	\$14.29	\$4.27	\$11.72
Diluted	\$13.74	\$4.09	\$11.28

(1)

Certain stock options were not included in the computation of diluted earnings per share where the exercise price of the stock options exceeded the average market price and would have been anti-dilutive or where, when applying the treasury stock method to in-the-money options, the sum of the proceeds, including unrecognized compensation, exceeded the average market price and would have been anti-dilutive. For 2009, 2008 and 2007, the number of stock options excluded were 854,185, 553,137 and 258,946, respectively.

(l) Share-Based Payment Arrangements

The Company applies a fair value based measurement method in accounting for its share-based payment arrangements with eligible employees and directors. Compensation expense is estimated based on the fair value of the award at the grant date and is recognized in net income over the requisite service period with a corresponding increase in shareholders' equity. No value is attributed to awards that employees forfeit because they fail to satisfy vesting conditions. As such, the number of shares granted is reduced by assumed forfeitures and adjusted based on actual forfeitures until vesting. The Company's share-based payment arrangements generally vest over a three year period with one-third vesting on the first, second and third anniversaries of the grant date. The share-based compensation expense associated with such awards that have graded vesting features and vest based on service conditions only is calculated on a straight-line basis over the requisite service period for the entire award. For awards granted to retirement-eligible employees where no service is required for the employee to retain the award, the grant date fair value is immediately recognized as compensation expense at the grant date because the employee is able to retain the award without continuing to provide service. For employees near retirement eligibility, attribution of compensation cost is over the period from the grant date to the retirement eligibility date. These charges had no impact on the

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Company's cash flows or total shareholders' equity. See Note 15 for information relating to the Company's share-based payment awards.

(m) Guaranty Fund and Other Related Assessments

Liabilities for guaranty fund and other related assessments in the Company's insurance and reinsurance operations are accrued when the Company receives notice that an amount is payable, or earlier if a reasonable estimate of the assessment can be made.

(n) Recent Accounting Pronouncements

In January 2010, the FASB issued an Accounting Standards Update ("ASU") to improve disclosure requirements related to fair value measurements. The ASU requires more robust disclosures about (i) different classes of assets and liabilities measured at fair value, (ii) the valuation techniques and inputs to fair value measurements for both Levels 2 and 3, (iii) the activity within Level 3 fair value measurements (*i.e.*, in the reconciliation for fair value measurements using significant unobservable inputs activity should be presented on a gross basis), and (iv) the transfers between Levels 1, 2 and 3, (*i.e.*, include the reasons for significant transfers in and out of Levels 1 and 2). The ASU is effective for interim and annual reporting periods beginning after December 15, 2009, except for the disclosures about purchases, sales, issuances, and settlements in the roll forward activity in Level 3 fair value measurements, which will become effective for fiscal years beginning after December 15, 2010. Accordingly, the Company will adopt the appropriate disclosure provisions of the ASU on January 1, 2010.

In September 2009, the FASB issued an ASU regarding the estimation of the fair value of investments in certain entities that calculate net asset value per share (or its equivalent). This ASU provides additional guidance on estimating the fair value of certain alternative investments and its provisions create a practical expedient to measure the fair value of an alternative investment on the basis of the net asset value per share of the investment. The ASU also requires additional disclosures about the attributes of certain alternative investments. The ASU is effective for interim and annual reporting periods ending after December 15, 2009 and, accordingly, the Company adopted this ASU effective October 1, 2009. The adoption did not have a material impact on the Company's consolidated financial position or results of operations.

In August 2009, the FASB issued an ASU to amend the guidance regarding the fair value measurement of liabilities. This ASU provides clarification that in circumstances in which a quoted price in an active market for an identical liability is not available, a reporting entity is required to measure fair value using other valuation techniques, including a technique that uses: (a) the quoted price of the identical liability when traded as an asset; and (b) quoted prices for similar liabilities or similar liabilities when traded as assets. The amendments in this ASU also clarify that when estimating the fair value of a liability, a reporting entity is not required to include a separate input or adjustment to other inputs relating to the existence of a restriction that prevents the transfer of the liability. Lastly, this ASU clarifies that both a quoted price in an active market for the identical liability at the measurement date and the quoted price for the identical liability when traded as an asset in an active market when no adjustments to the quoted price of the asset are required are Level 1 fair value measurements. This ASU was effective for the Company in the interim period ending September 30, 2009, and the adoption did not have a material impact on the Company's consolidated financial position or results of operations.

In June 2009, the FASB approved the "FASB Accounting Standards Codification" (the "Codification") as the single source of authoritative nongovernmental GAAP effective July 1, 2009. The

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Codification does not change current GAAP, but is intended to simplify user access to all authoritative GAAP by providing all the authoritative literature related to a particular topic in one place. All existing accounting standard documents will be superseded and all other accounting literature not included in the Codification will be considered non-authoritative. The Codification was effective for the Company in the interim period ending September 30, 2009, and the adoption did not impact its consolidated financial position or results of operations.

In June 2009, the FASB issued amendments to the guidance regarding the consolidation of variable interest entities ("VIEs"), which affect all entities currently within the scope of the December 2003 revised version of the guidance, as well as qualifying special-purpose entities that are currently excluded from the scope of the guidance. The amendments require an analysis to determine whether a variable interest gives a company a controlling financial interest in a VIE. In addition, they require an ongoing reassessment of all VIEs and eliminate the quantitative approach previously required for determining whether a company is the primary beneficiary. The amendments are effective for fiscal years beginning after November 15, 2009. Accordingly, the Company will adopt the amended guidance on January 1, 2010. The Company does not anticipate that adopting the provisions under the amended guidance will significantly impact its consolidated financial position and results of operations. See Note 13, "Commitments and Contingencies Variable Interest Entities" for additional information.

In June 2009, the FASB issued an amendment to the guidance regarding accounting for transfers of financial assets. This amendment removes the concept of a qualifying special-purpose entity from the guidance regarding the accounting for transfers and servicing of financial assets and extinguishment of liabilities, and removes the exception from applying to the consolidation of VIEs. This amendment also clarifies the requirements for isolation and limitations on portions of financial assets that are eligible for sale accounting and enhances disclosures about transfers of financial assets and a transferor's continuing involvement with transferred financial assets. This amendment is effective prospectively to transfers of financial assets occurring in fiscal years beginning after November 15, 2009. Accordingly, the Company will adopt this amendment on January 1, 2010. The Company does not anticipate that adopting the provisions under the amended guidance will significantly effect its consolidated financial position and results of operations.

In May 2009, the FASB issued guidance regarding subsequent events, which establishes general standards for accounting for and disclosure of events that occur after the balance sheet date but before the financial statements are issued or are available to be issued. This guidance was effective with interim and annual financial periods ending after June 15, 2009, and the adoption did not impact the Company's consolidated financial position or results of operations.

In April 2009, the FASB issued guidance regarding the recognition and presentation of other-than-temporary impairments, which requires entities to separate an other-than-temporary impairment of a debt security into two components when there are credit related losses associated with the impaired debt security for which the Company asserts that it does not have the intent to sell the security, and it is more likely than not that it will not be required to sell the security before recovery of its cost basis. The amount of the other-than-temporary impairment related to a credit loss is recognized in earnings, and the amount of the other-than-temporary impairment related to other factors (e.g., interest rates, market conditions, etc.) is recorded as a component of other comprehensive income (loss). This guidance was effective for periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. The Company elected to adopt this guidance effective for its interim period ending March 31, 2009. See Note 7, "Investment Information Other-Than-Temporary Impairments."

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

In April 2009, the FASB issued guidance regarding the determination of fair value when the volume and level of activity for the asset or liability have significantly decreased and the identification of transactions that are not orderly. This guidance also amended guidance regarding fair value measurements to expand certain disclosure requirements. This guidance was effective for periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. The Company elected to adopt this guidance effective for its interim period ending March 31, 2009, and its adoption did not have a material impact on the Company's consolidated financial position or results of operations. See Note 8, "Fair Value."

In April 2009, the FASB issued guidance regarding the interim disclosures about fair value of financial instruments, which requires disclosures about fair value of financial instruments in interim and annual financial statements. This guidance was effective for periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. The Company elected to adopt this guidance effective for its interim period ending March 31, 2009, and has included the required disclosures in its notes to consolidated financial statements where applicable.

3. Segment Information

The Company classifies its businesses into two underwriting segments—insurance and reinsurance—and corporate and other (non-underwriting). The Company's insurance and reinsurance operating segments each have segment managers who are responsible for the overall profitability of their respective segments and who are directly accountable to the Company's chief operating decision makers, the Chairman, President and Chief Executive Officer of ACGL and the Chief Financial Officer of ACGL. The chief operating decision makers do not assess performance, measure return on equity or make resource allocation decisions on a line of business basis. The Company determined its reportable operating segments using the management approach described in accounting guidance regarding disclosures about segments of an enterprise and related information.

Management measures segment performance based on underwriting income or loss. The Company does not manage its assets by segment and, accordingly, investment income is not allocated to each underwriting segment. In addition, other revenue and expense items are not evaluated by segment. The accounting policies of the segments are the same as those used for the preparation of the Company's consolidated financial statements. Intersegment business is allocated to the segment accountable for the underwriting results.

The insurance segment consists of the Company's insurance underwriting subsidiaries which primarily write on both an admitted and non-admitted basis. Specialty product lines include: casualty; construction; executive assurance; healthcare; national accounts casualty; professional liability; programs; property, energy, marine and aviation; surety; travel and accident; and other (consisting of excess workers' compensation, employers' liability and collateral protection business).

The reinsurance segment consists of the Company's reinsurance underwriting subsidiaries. The reinsurance segment generally seeks to write significant lines on specialty property and casualty reinsurance contracts. Classes of business include: casualty; marine and aviation; other specialty; property catastrophe; property excluding property catastrophe (losses on a single risk, both excess of loss and pro rata); and other (consisting of non-traditional and casualty clash business).

Corporate and other (non-underwriting) includes net investment income, other income (loss), other expenses incurred by the Company, interest expense, net realized gains or losses, net impairment losses recognized in earnings, equity in net income (loss) of investment funds accounted for using the equity method, net foreign exchange gains or losses, income taxes and dividends on the Company's non-cumulative preferred shares.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following tables set forth an analysis of the Company's underwriting income by segment, together with a reconciliation of underwriting income to net income available to common shareholders:

	Year Ended December 31, 2009		
	Insurance	Reinsurance	Total
Gross premiums written (1)	\$ 2,512,127	\$ 1,093,940	\$ 3,592,931
Net premiums written (1)	1,704,284	1,058,828	2,763,112
Net premiums earned (1)	\$ 1,688,519	\$ 1,154,226	\$ 2,842,745
Fee income	3,362	100	3,462
Losses and loss adjustment expenses	(1,139,415)	(515,259)	(1,654,674)
Acquisition expenses, net	(238,261)	(255,299)	(493,560)
Other operating expenses	(281,340)	(80,567)	(361,907)
Underwriting income	\$ 32,865	\$ 303,201	336,066
Net investment income			390,131
Net realized gains			143,582
Net impairment losses recognized in earnings			(66,133)
Equity in net income of investment funds accounted for using the equity method			167,819
Other income			20,016
Other expenses			(30,231)
Interest expense			(24,440)
Net foreign exchange losses			(39,157)
Income before income taxes			897,653
Income tax expense			(20,708)
Net income			876,945
Preferred dividends			(25,844)
Net income available to common shareholders			\$ 851,101
Underwriting Ratios			
Loss ratio	67.5%	44.6%	58.2%
Acquisition expense ratio (2)	13.9%	22.1%	17.2%
Other operating expense ratio	16.7%	7.0%	12.7%
Combined ratio	98.1%	73.7%	88.1%

(1) Certain amounts included in the gross premiums written of each segment are related to intersegment transactions. Accordingly, the sum of gross premiums written for each segment does not agree to the total gross premiums written as shown in the table above due to the elimination of intersegment transactions in the total. The insurance segment and reinsurance segment results include \$1.1 million and \$12.0 million, respectively, of gross and net premiums written and \$1.6 million and \$14.4 million, respectively, of net premiums earned assumed through intersegment transactions.

(2) The acquisition expense ratio is adjusted to include policy-related fee income.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	Year Ended December 31, 2008		
	Insurance	Reinsurance	Total
Gross premiums written (1)	\$ 2,490,919	\$ 1,201,903	\$ 3,669,076
Net premiums written (1)	1,657,603	1,148,123	2,805,726
Net premiums earned (1)	\$ 1,675,089	\$ 1,170,365	\$ 2,845,454
Fee income	3,445	1,261	4,706
Losses and loss adjustment expenses	(1,194,528)	(654,216)	(1,848,744)
Acquisition expenses, net	(224,539)	(265,970)	(490,509)
Other operating expenses	(288,883)	(78,421)	(367,304)
Underwriting income (loss)	(\$ 29,416)	\$ 173,019	143,603
Net investment income			468,080
Net realized losses			(3,939)
Net impairment losses recognized in earnings			(181,162)
Equity in net loss of investment funds accounted for using the equity method			(178,608)
Other income			12,282
Other expenses			(28,498)
Interest expense			(23,838)
Net foreign exchange gains			96,585
Income before income taxes			304,505
Income tax expense			(13,539)
Net income			290,966
Preferred dividends			(25,844)
Net income available to common shareholders			\$ 265,122
Underwriting Ratios			
Loss ratio	71.3%	55.9%	65.0%
Acquisition expense ratio (2)	13.2%	22.7%	17.1%
Other operating expense ratio	17.2%	6.7%	12.9%
Combined ratio	101.7%	85.3%	95.0%

(1) Certain amounts included in the gross premiums written of each segment are related to intersegment transactions. Accordingly, the sum of gross premiums written for each segment does not agree to the total gross premiums written as shown in the table above due to the elimination of intersegment transactions in the total. The insurance segment and reinsurance segment results include \$1.9 million and \$21.8 million, respectively, of gross and net premiums written and \$0.8 million and \$29.9 million, respectively, of net premiums earned assumed through intersegment transactions.

(2) The acquisition expense ratio is adjusted to include policy-related fee income.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	Year Ended December 31, 2007		
	Insurance	Reinsurance	Total
Gross premiums written (1)	\$ 2,660,302	\$ 1,517,645	\$ 4,140,143
Net premiums written (1)	1,717,548	1,184,388	2,901,936
Net premiums earned (1)	\$ 1,702,343	\$ 1,242,307	\$ 2,944,650
Fee income	5,063	2,473	7,536
Losses and loss adjustment expenses	(1,077,769)	(566,401)	(1,644,170)
Acquisition expenses, net	(201,703)	(278,828)	(480,531)
Other operating expenses	(276,388)	(81,059)	(357,447)
Underwriting income	\$ 151,546	\$ 318,492	470,038
Net investment income			463,241
Net realized gains			58,338
Net impairment losses recognized in earnings			(30,197)
Equity in net loss of investment funds accounted for using the equity method			(171)
Other income			9,048
Other expenses			(30,691)
Interest expense			(22,093)
Net foreign exchange losses			(43,969)
Income before income taxes			873,544
Income tax expense			(15,601)
Net income			857,943
Preferred dividends			(25,844)
Net income available to common shareholders			\$ 832,099
Underwriting Ratios			
Loss ratio	63.3%	45.6%	55.8%
Acquisition expense ratio (2)	11.7%	22.4%	16.2%
Other operating expense ratio	16.2%	6.5%	12.1%
Combined ratio	91.2%	74.5%	84.1%

(1) Certain amounts included in the gross premiums written of each segment are related to intersegment transactions. Accordingly, the sum of gross premiums written for each segment does not agree to the total gross premiums written as shown in the table above due to the elimination of intersegment transactions in the total. The insurance segment and reinsurance segment results include \$1.0 million and \$36.8 million, respectively, of gross and net premiums written and \$1.0 million and \$40.3 million, respectively, of net premiums earned assumed through intersegment transactions.

(2) The acquisition expense ratio is adjusted to include policy-related fee income.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Set forth below is summary information regarding net premiums written and earned by major line of business and net premiums written by client and underwriting location for the insurance segment:

INSURANCE SEGMENT	Years Ended December 31,					
	2009		2008		2007	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Net premiums written (1)						
Property, energy, marine and aviation	\$ 353,761	20.8	\$ 334,635	20.2	\$ 328,966	19.2
Programs	274,735	16.1	270,449	16.3	235,793	13.7
Professional liability	235,892	13.8	246,891	14.9	269,479	15.7
Executive assurance	220,088	12.9	193,602	11.7	185,351	10.8
Construction	154,087	9.0	165,490	10.0	172,061	10.0
Casualty	103,546	6.1	116,096	7.0	183,267	10.7
National accounts casualty	79,088	4.6	47,936	2.9	32,214	1.9
Travel and accident	68,617	4.0	61,986	3.7	58,891	3.4
Surety	43,353	2.5	50,376	3.0	56,062	3.3
Healthcare	42,350	2.5	44,596	2.7	63,757	3.7
Other (2)	128,767	7.7	125,546	7.6	131,707	7.6
Total	\$ 1,704,284	100.0	\$ 1,657,603	100.0	\$ 1,717,548	100.0
Net premiums earned (1)						
Property, energy, marine and aviation	\$ 338,430	20.0	\$ 333,777	19.9	\$ 334,877	19.7
Programs	275,586	16.3	257,110	15.3	231,012	13.6
Professional liability	232,001	13.7	256,192	15.3	268,225	15.8
Executive assurance	212,962	12.6	181,333	10.8	184,154	10.8
Construction	163,079	9.7	166,146	9.9	166,450	9.8
Casualty	121,146	7.2	153,200	9.1	201,939	11.9
National accounts casualty	67,093	4.0	42,102	2.5	26,488	1.6
Travel and accident	66,127	3.9	62,564	3.7	56,613	3.3
Surety	49,219	2.9	51,556	3.1	67,197	3.9
Healthcare	43,947	2.6	49,754	3.0	68,456	4.0
Other (2)	118,929	7.1	121,355	7.4	96,932	5.6
Total	\$ 1,688,519	100.0	\$ 1,675,089	100.0	\$ 1,702,343	100.0
Net premiums written by client location (1)						
United States	\$ 1,268,347	74.4	\$ 1,242,906	75.0	\$ 1,323,376	77.1
Europe	267,093	15.7	244,849	14.8	250,824	14.6
Other	168,844	9.9	169,848	10.2	143,348	8.3
Total	\$ 1,704,284	100.0	\$ 1,657,603	100.0	\$ 1,717,548	100.0
Net premiums written by underwriting location (1)						
United States	\$ 1,243,063	72.9	\$ 1,236,712	74.6	\$ 1,309,401	76.2
Europe	384,363	22.6	342,021	20.6	330,746	19.3
Other	76,858	4.5	78,870	4.8	77,401	4.5
Total	\$ 1,704,284	100.0	\$ 1,657,603	100.0	\$ 1,717,548	100.0

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

- (1) Insurance segment results include premiums written and earned assumed through intersegment transactions of \$1.1 million and \$1.6 million, respectively, for 2009, \$1.9 million and \$0.8 million, respectively, for 2008, and \$1.0 million and \$1.0 million, respectively, for 2007. Insurance segment results exclude premiums written and earned ceded through intersegment transactions of \$12.0 million and \$14.4 million, respectively, for 2009, \$21.8 million and \$29.9 million, respectively, for 2008, and \$36.8 million and \$40.3 million, respectively, for 2007.
- (2) Includes excess workers' compensation, employers' liability, and collateral protection business.

F-23

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table sets forth the reinsurance segment's net premiums written and earned by major line of business and type of business, together with net premiums written by client and underwriting location:

REINSURANCE SEGMENT	Years Ended December 31,					
	2009		2008		2007	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Net premiums written (1)						
Property excluding property catastrophe (2)	\$ 349,915	33.0	\$ 328,684	28.6	\$ 248,367	21.0
Casualty (3)	325,699	30.8	347,198	30.2	466,209	39.4
Property catastrophe	237,445	22.4	231,146	20.1	202,203	17.1
Marine and aviation	77,677	7.3	90,733	7.9	110,586	9.3
Other specialty	65,189	6.2	146,452	12.8	148,776	12.6
Other	2,903	0.3	3,910	0.4	8,247	0.6
Total	\$ 1,058,828	100.0	\$ 1,148,123	100.0	\$ 1,184,388	100.0
Net premiums earned (1)						
Property excluding property catastrophe (2)	\$ 373,088	32.3	\$ 278,234	23.8	\$ 264,151	21.3
Casualty (3)	344,938	29.9	415,983	35.5	505,578	40.7
Property catastrophe	236,073	20.5	219,767	18.8	171,496	13.8
Marine and aviation	90,441	7.8	103,649	8.9	104,482	8.4
Other specialty	106,698	9.2	147,185	12.6	184,597	14.9
Other	2,988	0.3	5,547	0.4	12,003	0.9
Total	\$ 1,154,226	100.0	\$ 1,170,365	100.0	\$ 1,242,307	100.0
Net premiums written (1)						
Pro rata	\$ 586,212	55.4	\$ 735,655	64.1	\$ 803,352	67.8
Excess of loss	472,616	44.6	412,468	35.9	381,036	32.2
Total	\$ 1,058,828	100.0	\$ 1,148,123	100.0	\$ 1,184,388	100.0
Net premiums earned (1)						
Pro rata	\$ 704,470	61.0	\$ 763,128	65.2	\$ 874,647	70.4
Excess of loss	449,756	39.0	407,237	34.8	367,660	29.6
Total	\$ 1,154,226	100.0	\$ 1,170,365	100.0	\$ 1,242,307	100.0
Net premiums written by client location (1)						
United States	\$ 668,985	63.2	\$ 631,896	55.0	\$ 688,841	58.2
Europe	213,211	20.1	331,072	28.8	258,952	21.9
Bermuda	127,212	12.0	137,215	12.0	179,935	15.2
Other	49,420	4.7	47,940	4.2	56,660	4.7
Total	\$ 1,058,828	100.0	\$ 1,148,123	100.0	\$ 1,184,388	100.0
Net premiums written by underwriting location (1)						
Bermuda	\$ 596,334	56.3	\$ 662,896	57.7	\$ 691,782	58.4
United States	396,947	37.5	419,805	36.6	471,551	39.8
Other	65,547	6.2	65,422	5.7	21,055	1.8

Total	\$ 1,058,828	100.0	\$ 1,148,123	100.0	\$ 1,184,388	100.0
-------	--------------	-------	--------------	-------	--------------	-------

-
- (1) Reinsurance segment results include premiums written and earned assumed through intersegment transactions of \$12.0 million and \$14.4 million, respectively, for 2009, \$21.8 million and \$29.9 million, respectively, for 2008, and \$36.8 million and \$40.3 million, respectively, for 2007. Reinsurance segment results exclude premiums written and earned ceded through intersegment transactions of \$1.1 million and \$1.6 million, respectively, for 2009, \$1.9 million and \$0.8 million, respectively, for 2008, and \$1.0 million and \$1.0 million, respectively, for 2007.
- (2) Includes facultative business.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (3) Includes professional liability, executive assurance and healthcare business.

4. Reinsurance

In the normal course of business, the Company's insurance subsidiaries cede a portion of their premium through pro rata and excess of loss reinsurance agreements on a treaty or facultative basis. The Company's reinsurance subsidiaries participate in "common account" retrocessional arrangements for certain pro rata treaties. Such arrangements reduce the effect of individual or aggregate losses to all companies participating on such treaties, including the reinsurers, such as the Company's reinsurance subsidiaries, and the ceding company. In addition, the Company's reinsurance subsidiaries may purchase retrocessional coverage as part of their risk management program. Reinsurance recoverables are recorded as assets, predicated on the reinsurers' ability to meet their obligations under the reinsurance agreements. If the reinsurers are unable to satisfy their obligations under the agreements, the Company's insurance or reinsurance subsidiaries would be liable for such defaulted amounts (see Note 13).

The effects of reinsurance on the Company's written and earned premiums and losses and loss adjustment expenses with unaffiliated reinsurers were as follows:

	Years Ended December 31,		
	2009	2008	2007
<i>Premiums Written</i>			
Direct	\$ 2,427,044	\$ 2,385,807	\$ 2,564,902
Assumed	1,165,887	1,283,269	1,575,241
Ceded	(829,819)	(863,350)	(1,238,207)
Net	\$ 2,763,112	\$ 2,805,726	\$ 2,901,936
<i>Premiums Earned</i>			
Direct	\$ 2,439,173	\$ 2,479,271	\$ 2,570,316
Assumed	1,269,454	1,402,478	1,622,656
Ceded	(865,882)	(1,036,295)	(1,248,322)
Net	\$ 2,842,745	\$ 2,845,454	\$ 2,944,650
<i>Losses and Loss Adjustment Expenses</i>			
Direct	\$ 1,486,349	\$ 1,717,158	\$ 1,428,610
Assumed	559,776	836,000	759,578
Ceded	(391,451)	(704,414)	(544,018)
Net	\$ 1,654,674	\$ 1,848,744	\$ 1,644,170

The Company monitors the financial condition of its reinsurers and attempts to place coverages only with substantial, financially sound carriers. At December 31, 2009, approximately 90.0% of the Company's reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.72 billion were due from carriers which had an A.M. Best rating of "A-" or better and the largest reinsurance recoverables from any one carrier was less than 5.8% of the Company's total shareholders' equity. At December 31, 2008, approximately 88.5% of the Company's reinsurance recoverables on paid and unpaid losses (not including prepaid reinsurance premiums) of \$1.79 billion were due from carriers which had an A.M. Best rating of "A-" or better, and the largest reinsurance recoverable from any one carrier was less than 7.3% of the Company's total shareholders' equity.

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

On December 29, 2005, Arch Re Bermuda entered into a quota share reinsurance treaty with Flatiron Re Ltd. ("Flatiron"), a Bermuda reinsurance company, pursuant to which Flatiron assumed a 45% quota share (the "Treaty") of certain lines of property and marine business underwritten by Arch Re Bermuda for unaffiliated third parties for the 2006 and 2007 underwriting years (January 1, 2006 to December 31, 2007). Effective June 28, 2006, the parties amended the Treaty to increase the percentage ceded to Flatiron from 45% to 70% of all covered business bound by Arch Re Bermuda from (and including) June 28, 2006 until (and including) August 15, 2006 provided such business did not incept beyond September 30, 2006. The ceding percentage for all business bound outside of this period continued to be 45%. On December 31, 2007, the Treaty expired by its terms.

Flatiron is required to contribute funds into a trust for the benefit of Arch Re Bermuda (the "Trust"). Effective June 28, 2006, the parties amended the Treaty to provide that, through the earning of all written premium, the amount required to be on deposit in the Trust, together with certain other amounts, will be an amount equal to a calculated amount estimated to cover ceded losses arising from in excess of two 1-in-250 year events for the applicable forward twelve-month period (the "Requisite Funded Amount"). If the actual amounts on deposit in the Trust, together with certain other amounts (the "Funded Amount"), do not at least equal the Requisite Funded Amount, Arch Re Bermuda will, among other things, recapture unearned premium reserves and reassume losses that would have been ceded in respect of such unearned premiums. No assurances can be given that actual losses will not exceed the Requisite Funded Amount or that Flatiron will make, or will have the ability to make, the required contributions into the Trust.

Arch Re Bermuda pays to Flatiron a reinsurance premium in the amount of the ceded percentage of the original gross written premium on the business reinsured less a ceding commission, which includes a reimbursement of direct acquisition expenses as well as a commission to Arch Re Bermuda for generating the business. The Treaty also provides for a profit commission to Arch Re Bermuda based on the underwriting results for the 2006 and 2007 underwriting years on a cumulative basis. For 2009, \$3.8 million of premiums written, \$22.0 million of premiums earned and a reduction of \$11.6 million of losses and loss adjustment expenses were ceded to Flatiron by Arch Re Bermuda, compared to \$24.7 million of premiums written, \$151.4 million of premiums earned and \$48.6 million of losses and loss adjustment expenses for 2008 and \$311.4 million of premiums written, \$282.2 million of premiums earned and \$100.4 million of losses and loss adjustment expenses for 2007. Reinsurance recoverables from Flatiron, which is not rated by A.M. Best, were \$97.6 million at December 31, 2009, compared to \$148.7 million at December 31, 2008. As noted above, Flatiron is required to contribute funds into a trust for the benefit of Arch Re Bermuda. The recoverable from Flatiron was fully collateralized through such trust at December 31, 2009 and 2008.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

5. Reserve for Losses and Loss Adjustment Expenses

The following table represents an analysis of losses and loss adjustment expenses and a reconciliation of the beginning and ending reserve for losses and loss adjustment expenses:

	Years Ended December 31,		
	2009	2008	2007
Reserve for losses and loss adjustment expenses at beginning of year	\$ 7,666,957	\$ 7,092,452	\$ 6,463,041
Unpaid losses and loss adjustment expenses recoverable	1,729,135	1,609,619	1,552,157
Net reserve for losses and loss adjustment expenses at beginning of year	5,937,822	5,482,833	4,910,884
Net incurred losses and loss adjustment expenses relating to losses occurring in:			
Current year	1,843,875	2,158,914	1,829,534
Prior years	(189,201)	(310,170)	(185,364)
Total net incurred losses and loss adjustment expenses	1,654,674	1,848,744	1,644,170
Foreign exchange (gains) losses	60,506	(133,881)	45,192
Net paid losses and loss adjustment expenses relating to losses occurring in:			
Current year	(272,295)	(305,513)	(274,102)
Prior years	(1,166,795)	(954,361)	(843,311)
Total net paid losses and loss adjustment expenses	(1,439,090)	(1,259,874)	(1,117,413)
Net reserve for losses and loss adjustment expenses at end of year	6,213,912	5,937,822	5,482,833
Unpaid losses and loss adjustment expenses recoverable	1,659,500	1,729,135	1,609,619
Reserve for losses and loss adjustment expenses at end of year	\$ 7,873,412	\$ 7,666,957	\$ 7,092,452

2009 Prior Year Reserve Development

During 2009, the Company recorded estimated net favorable development on prior year loss reserves of \$189.2 million, which consisted of \$142.1 million from the reinsurance segment and \$47.1 million from the insurance segment.

The reinsurance segment's net favorable development of \$142.1 million consisted of \$81.7 million from short-tailed lines and \$80.4 million from long-tailed lines, partially offset by \$20.0 million of adverse development on medium-tailed lines. Favorable development in short-tailed lines included \$57.6 million of favorable development from property catastrophe and other property lines. Such amount included reductions in 2005 to 2008 underwriting years of \$9.9 million, \$2.2 million, \$17.8 million and \$25.7 million, respectively. In addition, favorable development in short-tailed lines included \$21.8 million from other specialty business, including \$6.2 million and \$7.5 million from the 2004 and 2005 underwriting years. The reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from a lower level of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during 2009. Net favorable development of \$80.4 million in long-tailed lines included reductions in casualty reserves of

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

\$27.0 million, \$34.6 million and \$17.6 million from the 2004 to 2006 underwriting years which primarily resulted from a lower level of reported and paid claims activity than previously anticipated on U.S. and international excess liability, professional liability and D&O lines. Over time, historical loss information for older underwriting years has been given more weight in the reinsurance segment's reserving process based on the continued maturation of its reserves. Adverse development on medium-tailed lines resulted from increases on marine exposures in the 2008 underwriting year of \$31.8 million, due in part to increases in Hurricane Ike estimates, partially offset by reductions in the 2004 to 2006 underwriting years.

The insurance segment's net favorable development of \$47.1 million was primarily due to reductions in reserves in medium-tailed and short-tailed lines of business. Such amount included favorable development in professional liability reserves from the 2005 to 2007 accident years (*i.e.*, the year in which a loss occurred) of \$6.3 million, \$16.1 million and \$8.6 million, respectively, and adverse development on the 2008 accident year of \$9.4 million. In addition, favorable development on construction reserves from the 2005 and 2006 accident years contributed \$10.6 million and \$5.4 million, respectively, which resulted from lower than expected large loss activity. Favorable development in short-tailed lines primarily consisted of reductions in property reserves from the 2007 and 2008 accident years of \$9.4 million and \$11.1 million, respectively. Offsetting favorable development on medium-tailed and short-tailed lines of business were increases in executive assurance reserves for the 2007 and 2008 accident years of \$14.8 million and \$28.3 million, respectively, due to large specific risk loss activity relating to the credit crisis, partially offset by favorable development in the 2004 to 2006 accident years of \$4.1 million, \$17.5 million and \$3.6 million, respectively. Reductions in the 2004 to 2006 accident years relate to less large loss activity than expected in commercial D&O, a distinctive downward trend in security class action cases filed from 2004 through 2006, and to the claims-made nature of the coverage. The claims-made aspect eliminates the potential of new claims being reported for these years, and narrows the remaining liability to changes in reserve estimation for claims which have already been reported.

2008 Prior Year Reserve Development

During 2008, the Company recorded estimated net favorable development on prior year loss reserves of \$310.2 million, which consisted of \$231.2 million from the reinsurance segment and \$79.0 million from the insurance segment.

The reinsurance segment's net favorable development of \$231.2 million consisted of \$126.1 million from short-tailed lines and \$105.1 million from medium-tailed and long-tailed business. The reinsurance segment's favorable development in short-tailed lines of \$126.1 million included \$73.5 million of favorable development from property catastrophe and other property lines. Of such amount, \$42.0 million of favorable development came from the reinsurance segment's property catastrophe business, including \$10.8 million, \$11.4 million and \$15.7 million from the 2005 to 2007 underwriting years, respectively. The remainder was attributable to favorable development on other property business, primarily from the 2005 underwriting year. In addition, favorable development in short-tailed lines reflected \$46.5 million of favorable development in other specialty business, including \$16.7 million, \$5.1 million and \$9.5 million from the 2005 to 2007 underwriting years, respectively, with the remainder attributable to earlier underwriting years. The reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from a lower level of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during 2008. The net favorable development of \$105.1 million in medium-tailed and long-tailed lines was primarily in casualty reserves from the 2003 to 2005 underwriting years, which contributed

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

\$31.0 million, \$38.7 million and \$14.2 million, respectively. The reductions in casualty reserves primarily resulted from a lower level of reported and paid claims activity than previously anticipated on U.S. and international excess liability, professional liability and D&O lines.

The insurance segment's net favorable development of \$79.0 million was primarily due to reductions in reserves in medium-tailed and long-tailed lines of business. Over 80 percent of this development is related to the executive assurance and professional liability lines of business. Executive assurance reserves developed favorably for accident years 2004 through 2006 by \$15.8 million, \$17.3 million, and \$17.6 million, respectively. These reductions relate to less large loss activity than expected in commercial D&O, a distinctive downward trend in security class action cases filed from 2004 through 2006, and to the claims-made nature of the coverage. Accident year 2007 experienced unfavorable development of \$19.7 million relating to the re-evaluation of claims given additional information available during 2008 regarding the impact of the credit crisis. Reserves for professional liability developed favorably as well, with the majority of the favorable development relating to accident years 2003 through 2005 with \$5.2 million, \$8.1 million, and \$19.1 million, respectively.

2007 Prior Year Reserve Development

During 2007, the Company recorded estimated net favorable development on prior year loss reserves of \$185.4 million, which consisted of \$172.7 million from the reinsurance segment and \$12.7 million from the insurance segment.

The reinsurance segment's net favorable development of \$172.7 million consisted of \$110.6 million from short-tailed lines and \$62.1 million from medium-tailed and long-tailed business. The reinsurance segment's favorable development in short-tailed lines of \$110.6 million included \$66.7 million of favorable development from property catastrophe and other property lines. Of such amount, \$16.6 million and \$44.3 million came from the 2004 and 2006 underwriting years, respectively. In addition, favorable development in short-tailed lines reflected \$47.0 million of favorable development in other specialty business, including \$7.9 million, \$11.1 million, \$12.4 million and \$14.4 million from the 2003 to 2006 underwriting years, respectively. The reduction of loss estimates for the reinsurance segment's short-tailed lines primarily resulted from a lower level of reported and paid claims activity than previously anticipated which led to decreases in certain loss ratio selections during 2007. The net favorable development of \$62.1 million in medium-tailed and long-tailed lines was primarily in casualty reserves from the 2003 to 2004 underwriting years, which contributed \$17.5 million and \$28.5 million, respectively. The reductions in casualty reserves primarily resulted from a lower level of reported and paid claims activity than previously anticipated on U.S. and international excess liability, professional liability and D&O lines.

The insurance segment's net favorable reserve development of \$12.7 million was primarily due to reductions in reserves in medium-tailed and long-tailed lines of business. Such amount included favorable development in executive assurance reserves from the 2003 to 2005 accident years of \$3.0 million, \$13.4 million and \$11.6 million, respectively, and favorable development in professional liability reserves from the 2003 to 2006 accident years of \$5.5 million, \$5.3 million, \$4.3 million and \$2.9 million, respectively. These reductions relate to less large loss activity than expected, the downward trend in security class action cases filed from 2003 through 2006 for executive assurance, and to the claims-made nature of these coverages. Adverse development on short-tailed lines primarily resulted from a \$58.1 million increase in surety reserves in the 2006 accident year due to large, specific risk loss activity, which was partially offset by reductions in the 2004 and 2005 accident years of \$2.6 million and \$14.6 million, respectively. Such amount was partially offset by reductions in property reserves in the

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

2004 and 2005 accident years of \$10.2 million and \$3.8 million, respectively, due to lower than expected large loss activity in the property and marine units.

6. Investment in Joint Venture

In May 2008, the Company provided \$100.0 million of funding to Gulf Reinsurance Limited ("Gulf Re"), a newly formed reinsurer based in the Dubai International Financial Centre, pursuant to the joint venture agreement with Gulf Investment Corporation GSC ("GIC"). Under the agreement, Arch Re Bermuda and GIC each own 50% of Gulf Re, which commenced underwriting activities in June 2008. Gulf Re provides property and casualty reinsurance primarily in the member states of the Gulf Cooperation Council, which include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. The initial capital of the joint venture consisted of \$200.0 million with an additional \$200.0 million commitment to be funded equally by the Company and GIC depending on the joint venture's business needs. The Company accounts for its investment in Gulf Re, shown as "Investment in joint venture," using the equity method and records its equity in the operating results of Gulf Re in "Other income" on a quarter lag basis.

7. Investment Information

The following table summarizes the Company's invested assets:

	December 31,	
	2009	2008
Fixed maturities available for sale, at market value	\$ 9,391,926	\$ 8,122,221
Fixed maturities pledged under securities lending agreements, at market value (1)	208,826	626,501
Total fixed maturities	9,600,752	8,748,722
Short-term investments available for sale, at market value	571,489	479,586
Short-term investments pledged under securities lending agreements, at market value (1)	3,994	101,564
TALF investments, at market value	250,265	
Other investments	172,172	109,601
Investment funds accounted for using the equity method	391,869	301,027
Total investments (1)	10,990,541	9,740,500
Securities transactions entered into but not settled at the balance sheet date	50,790	(18,236)
Total investments, net of securities transactions	\$ 11,041,331	\$ 9,722,264

(1)

In securities lending transactions, the Company receives collateral in excess of the market value of the fixed maturities and short-term investments pledged under securities lending agreements. For purposes of this table, the Company has excluded the collateral received and reinvested at December 31, 2009 and December 31, 2008 of \$207.0 million and \$730.2 million, respectively, and included the \$212.8 million and \$728.1 million, respectively, of "fixed maturities and short-term investments pledged under securities lending agreements, at market value."

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Fixed Maturities and Fixed Maturities Pledged Under Securities Lending Agreements

The following table summarizes the Company's fixed maturities and fixed maturities pledged under securities lending agreements, excluding TALF investments:

	Estimated Market Value	Gross Unrealized Gains	Gross Unrealized Losses	Amortized Cost	OTTI Unrealized Losses (1)
December 31, 2009:					
Corporate bonds	\$ 3,134,088	\$ 99,446	\$ (12,983)	\$ 3,047,625	\$ (19,667)
U.S. government and government agencies	1,553,672	8,716	(12,999)	1,557,955	(499)
Mortgage backed securities	1,449,382	13,158	(45,536)	1,481,760	(43,930)
Commercial mortgage backed securities	1,185,799	35,161	(11,724)	1,162,362	(3,750)
Municipal bonds	957,752	44,043	(2,284)	915,993	(145)
Non-U.S. government securities	752,215	41,858	(7,712)	718,069	(351)
Asset backed securities	567,844	21,713	(8,220)	554,351	(6,111)
Total	\$ 9,600,752	\$ 264,095	\$ (101,458)	\$ 9,438,115	\$ (74,453)
December 31, 2008:					
Corporate bonds	\$ 2,019,373	\$ 51,131	\$ (98,979)	\$ 2,067,221	
U.S. government and government agencies	1,463,897	77,762	(14,159)	1,400,294	
Mortgage backed securities	1,581,736	23,306	(125,759)	1,684,189	
Commercial mortgage backed securities	1,219,737	16,128	(68,212)	1,271,821	
Municipal bonds	965,966	26,815	(1,730)	940,881	
Non-U.S. government securities	527,972	33,690	(31,884)	526,166	

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Asset backed securities	970,041	1,121	(70,762)	1,039,682
Total	\$ 8,748,722	\$ 229,953	\$ (411,485)	\$ 8,930,254

(1) Represents the total other-than-temporary impairments ("OTTI") recognized in accumulated other comprehensive income ("AOCI"). It does not include the change in market value subsequent to the impairment measurement date. At December 31, 2009, the net unrealized loss related to securities for which a non-credit OTTI was recognized in AOCI was \$37.9 million.

The contractual maturities of the Company's fixed maturities and fixed maturities pledged under securities lending agreements are shown below. Expected maturities, which are management's best

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

estimates, will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

Maturity	December 31, 2009		December 31, 2008	
	Estimated Market Value	Amortized Cost	Estimated Market Value	Amortized Cost
Due in one year or less	\$ 227,668	\$ 220,095	\$ 173,168	\$ 169,187
Due after one year through five years	3,988,306	3,885,111	2,451,062	2,452,344
Due after five years through 10 years	1,844,377	1,800,371	1,726,742	1,686,575
Due after 10 years	337,376	334,065	626,236	626,456
	6,397,727	6,239,642	4,977,208	4,934,562
Mortgage backed securities	1,449,382	1,481,760	1,581,736	1,684,189
Commercial mortgage backed securities	1,185,799	1,162,362	1,219,737	1,271,821
Asset backed securities	567,844	554,351	970,041	1,039,682
Total	\$ 9,600,752	\$ 9,438,115	\$ 8,748,722	\$ 8,930,254

The Company had gross unrealized losses on its fixed maturities and fixed maturities pledged under securities lending agreements of \$101.5 million at December 31, 2009. At December 31, 2009, on a lot level basis, approximately 1,430 security lots out of a total of approximately 4,520 security lots were in an unrealized loss position and the largest single unrealized loss from a single lot in the Company's fixed maturity portfolio was \$2.2 million. The Company had gross unrealized losses on its fixed maturities and fixed maturities pledged under securities lending agreements of \$411.5 million at December 31, 2008. At December 31, 2008, on a lot level basis, approximately 2,360 security lots out of a total of approximately 3,900 security lots were in an unrealized loss position and the largest single unrealized loss from a single lot in the Company's fixed maturity portfolio was \$6.1 million.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table provides an analysis of the length of time each of those fixed maturities, fixed maturities pledged under securities lending agreements, equity securities and short-term investments with an unrealized loss has been in a continual unrealized loss position:

	Less than 12 Months		12 Months or More		Total	
	Estimated Market Value	Gross Unrealized Losses	Estimated Market Value	Gross Unrealized Losses	Estimated Market Value	Gross Unrealized Losses
December 31, 2009:						
Corporate bonds	\$ 547,376	\$ (7,742)	\$ 45,399	\$ (5,241)	\$ 592,775	\$ (12,983)
U.S. government and government agencies	1,112,534	(12,510)	5,309	(489)	1,117,843	(12,999)
Mortgage backed securities	636,817	(33,388)	62,382	(12,148)	699,199	(45,536)
Commercial mortgage backed securities	154,087	(4,808)	67,744	(6,916)	221,831	(11,724)
Municipal bonds	151,412	(2,284)			151,412	(2,284)
Non-U.S. government securities	218,394	(7,712)			218,394	(7,712)
Asset backed securities	101,679	(5,838)	22,915	(2,382)	124,594	(8,220)
Total	2,922,299	(74,282)	203,749	(27,176)	3,126,048	(101,458)
Other investments	9,071	(304)	29,439	(5,195)	38,510	(5,499)
Short-term investments	64,616	(1,858)			64,616	(1,858)
Total	\$ 2,995,986	\$ (76,444)	\$ 233,188	\$ (32,371)	\$ 3,229,174	\$ (108,815)
December 31, 2008:						
Corporate bonds	\$ 870,093	\$ (89,446)	\$ 30,608	\$ (9,533)	\$ 900,701	\$ (98,979)
U.S. government and government agencies	356,719	(14,159)			356,719	(14,159)
Mortgage backed securities	417,373	(105,154)	23,295	(20,605)	440,668	(125,759)
Commercial mortgage backed securities	714,497	(68,210)	52	(2)	714,549	(68,212)
Municipal bonds	93,072	(1,730)			93,072	(1,730)
Non-U.S. government securities	223,314	(31,882)	142	(2)	223,456	(31,884)
Asset backed securities	888,908	(63,845)	26,185	(6,917)	915,093	(70,762)
Total	3,563,976	(374,426)	80,282	(37,059)	3,644,258	(411,485)
Other investments	20,510	(3,649)	13,715	(20,919)	34,225	(24,568)
Short-term investments	33,080	(2,535)			33,080	(2,535)
Total	\$ 3,617,566	\$ (380,610)	\$ 93,997	\$ (57,978)	\$ 3,711,563	\$ (438,588)

Other-Than-Temporary Impairments*Adoption of Accounting Guidance*

This guidance requires that the Company record, as of the beginning of the interim period of adoption, a cumulative effect adjustment to reclassify the noncredit component of a previously recognized OTTI from retained earnings to other comprehensive income (loss). For purposes of

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

calculating the cumulative effect adjustment, the Company reviewed OTTI it had recorded through realized losses on securities held at December 31, 2008, which were \$171.1 million, and estimated the portion related to credit losses (*i.e.*, where the present value of cash flows expected to be collected are lower than the amortized cost basis of the security) and the portion related to all other factors. The Company determined that \$109.1 million of the OTTI previously recorded related to specific credit losses and \$62.0 million related to all other factors. The Company increased the amortized cost basis of these debt securities by \$62.0 million and recorded a cumulative effect adjustment, net of tax, in its shareholders' equity section. The cumulative effect adjustment had no effect on total shareholders' equity as it increased retained earnings and reduced accumulated other comprehensive income.

2009, 2008 and 2007 Periods

The Company performed quarterly reviews of its investments in the 2009, 2008 and 2007 periods in order to determine whether declines in market value below the amortized cost basis were considered other-than-temporary in accordance with applicable guidance. For the year ended December 31, 2009, the Company recorded \$66.1 million of net impairment losses recognized in earnings.

The following table provides a roll forward of the amount related to credit losses recognized in earnings for which a portion of an OTTI was recognized in accumulated other comprehensive income for the year ended December 31, 2009:

Year Ended December 31, 2009:	
Beginning balance at January 1, 2009	\$ 35,474
Credit loss impairments recognized on securities not previously impaired	16,221
Credit loss impairments recognized on securities previously impaired	35,530
Reductions for increases in cash flows expected to be collected that are recognized over the remaining life of the security	
Credit loss impairments previously recognized in AOCI on securities sold during the period	(3,078)
Ending balance at December 31, 2009	\$ 84,147

A description of the methodology and significant inputs used to measure the amount of OTTI related to credit losses of \$66.1 million for the year ended December 31, 2009 follows. At December 31, 2009, the Company did not have the intent to sell such securities, and determined that it is more likely than not that the Company will not be required to sell the securities before recovery of their cost basis.

Corporate bonds the Company recorded \$3.8 million of OTTI related to credit losses in the year ended December 31, 2009. The Company reviewed the business prospects, credit ratings, estimated loss given default factors and incorporated available information received from asset managers and rating agencies for each security. The amortized cost basis of the corporate bonds were adjusted down, if required, to the expected recovery value calculated in the OTTI review process;

Asset backed securities the Company recorded \$26.8 million of OTTI related to credit losses in the year ended December 31, 2009. The Company utilized underlying data, where available, for each security provided by asset managers and additional information from credit agencies in order to determine an expected recovery value for each security. The analysis provided by the asset managers on home equity asset backed securities includes expected cash flow projections under base case and stress case scenarios which modify expected default expectations and loss

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

severities and slow down prepayment assumptions. The significant inputs in the models include the expected default rates, delinquency rates and foreclosure costs. In the 2009 first and second quarters, the expected recovery values were reduced on a number of asset backed securities backed by sub-prime or Alt-A collateral due to reductions in the expected recovery values on such securities in each period. In the 2009 third and fourth quarters, the declines in expected recovery values were, in general, more moderate than in the earlier periods. These reductions followed the quarterly review of information received which indicated increases in expected default rates, foreclosure costs and other factors. On an ongoing basis, the Company reviews the process used by each asset manager in developing their analysis and, following such reviews, the Company determines what the expected recovery values are for each security, which incorporates both base case and stress case scenarios. For non-home equity asset backed securities, the Company used reports and analysis from asset managers and rating agencies in order to determine an expected recovery value for such securities. The amortized cost basis of the asset backed securities were adjusted down, if required, to the expected recovery value calculated in the OTTI review process;

Mortgage backed securities the Company recorded \$17.7 million of OTTI related to credit losses in the year ended December 31, 2009. The Company utilized underlying data, where available, for each security provided by asset managers and additional information from credit agencies in order to determine an expected recovery value for each security. The analysis provided by the asset managers includes expected cash flow projections under base case and stress case scenarios which modify expected default expectations and loss severities and slow down prepayment assumptions. The significant inputs in the models include the expected default rates, delinquency rates and foreclosure costs. In the 2009 first quarter, the expected recovery values were reduced on a number of mortgage backed securities due to reductions in the expected recovery values on such securities in each period. In the 2009 second through fourth quarters, the declines in expected recovery values were, in general, more moderate than in the 2009 first quarter. These reductions followed the quarterly review of information received which indicated increases in expected default expectations and foreclosure costs. On an ongoing basis, the Company reviews the process used by each asset manager in developing their analysis and, following such reviews, the Company determines what the expected recovery values are for each security, which incorporates both base case and stress case scenarios. The amortized cost basis of the mortgage backed securities were adjusted down, if required, to the expected recovery value calculated in the OTTI review process;

Investment of funds received under securities lending agreements the Company recorded \$3.5 million of OTTI related to credit losses in the year ended December 31, 2009. The Company utilized analysis from its securities lending program manager in order to determine an expected recovery value for certain sub-prime securities which are on a watch-list. The analysis provided expected cash flow projections for the securities using similar criteria as described in the mortgage backed securities section above. The amortized cost basis of the investment of funds received under securities lending agreements was adjusted down, if required, to the expected recovery value calculated in the OTTI review process;

Other investments the Company recorded \$14.3 million of OTTI related to credit losses in the year ended December 31, 2009. During the 2009 first quarter, the Company's investment in a Euro-denominated bank loan fund was written down to zero as the fund was required to wind down and begin the liquidation process during the period. The fund operated with leverage and was unable to successfully deleverage its balance sheet and restructure.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company believes that the \$74.5 million of OTTI included in accumulated other comprehensive income at December 31, 2009 on the securities which were considered by the Company to be impaired was due to market and sector-related factors, including limited liquidity and wide credit spreads (*i.e.*, not credit losses).

For the years ended December 31, 2008 and 2007, the Company recorded \$181.2 million and \$30.2 million, respectively, of OTTI as a charge against earnings. Such amounts were recorded prior to the adoption of the accounting pronouncement discussed above and included a portion related to credit losses and a portion related to all other factors.

Securities Lending Agreements

At December 31, 2009, the market value and amortized cost of fixed maturities and short-term investments pledged under securities lending agreements were \$212.8 million and \$214.7 million, respectively. At December 31, 2008, the market value and amortized cost of fixed maturities and short-term investments pledged under securities lending agreements were \$728.1 million and \$717.2 million, respectively.

At December 31, 2009, the market value and amortized cost of the reinvested collateral shown as "Investment of funds received under securities lending agreements" totaled \$91.2 million and \$96.6 million, respectively, while "Securities purchased under agreements to resell using funds received under securities lending agreements" totaled \$115.8 million. At December 31, 2008, the market value and amortized cost of the reinvested collateral shown as "Investment of funds received under securities lending agreements" totaled \$473.8 million and \$493.9 million, respectively, while "Securities purchased under agreements to resell using funds received under securities lending agreements" totaled \$256.4 million. At December 31, 2009, the reinvested collateral included sub-prime securities with a market value of \$18.9 million, compared to \$56.1 million at December 31, 2008.

TALF Program

As of December 31, 2009, the Company had \$250.3 million of securities under TALF which are reflected as "TALF investments, at market value" and \$217.6 million of secured financing from the FRBNY which is reflected as "TALF borrowings, at market value." Changes in market value for both the securities and borrowings are included in "Net realized gains (losses)" while interest income on the TALF investments is reflected in net investment income and interest expense on the TALF borrowings is reflected in interest expense. The Company recorded net realized gains for the year ended December 31, 2009 of \$4.2 million on the TALF program, consisting of \$3.0 million and \$1.2 million on changes in market value on the TALF investments and TALF borrowings, respectively.

Other Investments

The following table details the Company's other investments:

	December 31, 2009		December 31, 2008	
	Estimated Market Value	Cost	Estimated Market Value	Cost
Fixed income mutual funds	\$ 63,146	\$ 60,571	\$ 39,858	\$ 63,618
Privately held securities and other	109,026	101,934	69,743	62,240
Total	\$ 172,172	\$ 162,505	\$ 109,601	\$ 125,858

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Other investments include: (i) mutual funds which invest in fixed maturity securities and (ii) privately held securities and other which include the Company's investment in Aeolus LP (see Note 12) and an equity portfolio which was added in the 2009 third quarter. The Company elected to carry the equity portfolio at fair value under the fair value option afforded by accounting guidance regarding the fair value option for financial assets and liabilities. During the year ended December 31, 2009, the Company recorded a \$14.3 million OTTI provision in earnings on a Euro-denominated bank loan fund which was written down to zero as the fund was forced to wind down and enter liquidation during the period.

Investment Funds Accounted for Using the Equity Method

For 2009, the Company recorded \$167.8 million of equity in net income related to investment funds accounted for using the equity method, compared to \$178.6 million of equity in net loss for 2008, and \$0.2 million of equity in net loss for 2007. The 2009 and 2008 amounts primarily related to the Company's investments in U.S. and Euro-denominated bank loan funds and resulted from the extreme volatility in the capital and credit markets as the market values of the secured loans underlying the holdings in such funds declined significantly in 2008 with a substantial recovery during 2009. Such investments are generally recorded on a one month lag with some investments reported for on a three month lag based on the availability of reports from the investment funds. Investment funds accounted for using the equity method totaled \$391.9 million at December 31, 2009, compared to \$301.0 million at December 31, 2008. The Company's investment commitments relating to investment funds accounted for using the equity method and other investments totaled \$117.2 million at December 31, 2009.

A summary of aggregate financial information for the Company's investment funds accounted for using the equity method as of September 30, 2009 and 2008 and for the nine months ended September 30, 2009, 2008 and 2007 is as follows:

	September 30,	
	2009	2008
Invested assets	\$ 4,402,177	\$ 3,231,308
Total assets	4,402,796	3,232,031
Total liabilities	607	622
Net assets	\$ 4,402,189	\$ 3,231,409

	Nine Months Ended		
	September 30,		
	2009	2008	2007
Total revenues	\$ 1,676,117	\$ (364,574)	\$ 5,332
Total expenses	41,810	29,459	10,994
Net income (loss)	\$ 1,634,307	\$ (394,033)	\$ (5,662)

Restricted Assets

The Company is required to maintain assets on deposit, which primarily consist of fixed maturities, with various regulatory authorities to support its insurance and reinsurance operations. The Company has investments in segregated portfolios which are primarily used to provide collateral or guarantees for letters of credit to third parties (see Note 13). In addition, the Company maintains assets on deposit

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

which are available to settle insurance and reinsurance liabilities to third parties. The following table details the value of restricted assets:

	December 31,	
	2009	2008
Assets used for collateral or guarantees	\$ 1,017,482	\$ 804,934
Deposits with U.S. regulatory authorities	279,136	264,988
Trust funds	115,585	153,182
Deposits with non-U.S. regulatory authorities	76,094	57,336
Total restricted assets	\$ 1,488,297	\$ 1,280,440

In addition, Arch Re Bermuda maintains assets in trust accounts as collateral for insurance and reinsurance transactions with affiliated companies. At December 31, 2009 and 2008, such amounts approximated \$4.28 billion and \$4.03 billion, respectively.

Net Investment Income

The components of net investment income were derived from the following sources:

	Years Ended December 31,		
	2009	2008	2007
Fixed maturities	\$ 404,861	\$ 437,492	\$ 407,977
Short-term investments	1,897	21,006	41,690
Other (1)	4,413	23,473	27,675
Gross investment income	411,171	481,971	477,342
Investment expenses	(21,040)	(13,891)	(14,101)
Net investment income	\$ 390,131	\$ 468,080	\$ 463,241

(1) Primarily consists of interest income on operating cash accounts, other investments and securities lending transactions.

Net Realized Gains (Losses)

Net realized gains (losses) were as follows:

	Years Ended December 31,		
	2009	2008	2007
Fixed maturities	\$ 135,426	\$ (17,793)	\$ 66,716
Other investments	5,166	(10,039)	2,939
Other (1)	2,990	23,893	(11,317)
Net realized gains (losses)	\$ 143,582	\$ (3,939)	\$ 58,338

(1) Primarily consists of net realized gains or losses related to investment-related derivatives, futures contracts, and foreign currency forward contracts as well as \$4.2 million of net realized gains for the TALF program in 2009.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Proceeds from the sales of fixed maturities during 2009, 2008 and 2007 were \$19.78 billion, \$16.17 billion and \$18.95 billion, respectively. Gross gains of \$370.6 million, \$250.2 million and \$133.4 million were realized on those transactions during 2009, 2008 and 2007, respectively. Gross losses of \$235.2 million, \$268.0 million and \$66.7 million were realized during 2009, 2008 and 2007, respectively. Realized gains or losses on fixed maturities include changes in the market value of certain hybrid securities pursuant to applicable guidance. The fair market values of such hybrid securities at December 31, 2009 were approximately \$84.8 million, compared to \$43.7 million at December 31, 2008. The Company recorded realized gains of \$14.8 million on such securities in 2009, compared to realized losses of \$5.4 million in 2008 and nil realized gains or losses in 2007.

8. Fair Value

Accounting guidance regarding fair value measurements addresses how companies should measure fair value when they are required to use a fair value measure for recognition or disclosure purposes under GAAP and provides a common definition of fair value to be used throughout GAAP. It defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly fashion between market participants at the measurement date. In addition, it establishes a three-level valuation hierarchy for the disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The level in the hierarchy within which a given fair value measurement falls is determined based on the lowest level input that is significant to the measurement (Level 1 being the highest priority and Level 3 being the lowest priority).

The three levels are defined as follows:

Level

1: Inputs to the valuation methodology are observable inputs that reflect quoted prices (unadjusted) for *identical* assets or liabilities in *active markets*

Level

2: Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument

Level

3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement

Fair Value Measurements on a Recurring Basis

Following is a description of the valuation methodologies used for securities measured at fair value, as well as the general classification of such securities pursuant to the valuation hierarchy.

The Company determines the existence of an active market based on its judgment as to whether transactions for the financial instrument occur in such market with sufficient frequency and volume to provide reliable pricing information. The independent pricing sources obtain market quotations and actual transaction prices for securities that have quoted prices in active markets. The Company uses quoted values and other data provided by nationally recognized independent pricing sources as inputs into its process for determining fair values of its fixed maturity investments. To validate the techniques or models used by pricing sources, the Company's review process includes, but is not limited to: (i) quantitative analysis (*e.g.*, comparing the quarterly return for each managed portfolio to its target benchmark, with significant differences identified and investigated); (ii) a review of the average number of prices obtained in the pricing process and the range of resulting market values; (iii) initial and ongoing evaluation of methodologies used by outside parties to calculate fair value including a review

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

of deep dive reports on selected securities which indicated the use of observable inputs in the pricing process; (iv) comparing the fair value estimates to its knowledge of the current market; (v) a comparison of the pricing services' fair values to other pricing services' fair values for the same investments; and (vi) back-testing, which includes randomly selecting purchased or sold securities and comparing the executed prices to the fair value estimates from the pricing service. Where multiple quotes or prices were obtained, a price source hierarchy was maintained in order to determine which price source provided the fair value (i.e., a price obtained from a pricing service with more seniority in the hierarchy will be used from a less senior one in all cases). The hierarchy prioritizes pricing services based on availability and reliability and assigns the highest priority to index providers. Based on the above review, the Company will challenge any prices for a security or portfolio which are considered not to be representative of fair value.

The independent pricing sources obtain market quotations and actual transaction prices for securities that have quoted prices in active markets. Each source has its own proprietary method for determining the fair value of securities that are not actively traded. In general, these methods involve the use of "matrix pricing" in which the independent pricing source uses observable market inputs including, but not limited to, investment yields, credit risks and spreads, benchmarking of like securities, broker-dealer quotes, reported trades and sector groupings to determine a reasonable fair market value. In addition, pricing vendors use model processes, such as an Option Adjusted Spread model, to develop prepayment and interest rate scenarios. The Option Adjusted Spread model is commonly used to estimate fair value for securities such as mortgage backed and asset backed securities. In certain circumstances, when fair market values are unavailable from these independent pricing sources, quotes are obtained directly from broker-dealers who are active in the corresponding markets. Such quotes are subject to the validation procedures noted above. Of the \$10.74 billion of financial assets and liabilities measured at fair value, approximately \$1.17 billion, or 10.8%, were priced using non-binding broker-dealer quotes.

In April 2009, the FASB issued guidance regarding the determination of fair value when the volume and level of activity for the asset or liability have significantly decreased and the identification of transactions that are not orderly. This affirms that the objective of fair value when the market for an asset is not active is the price that would be received to sell the asset in an orderly transaction, and clarifies and includes additional factors for determining whether there has been a significant decrease in market activity for an asset when the market for that asset is not active. Under this guidance, if an entity determines that there has been a significant decrease in the volume and level of activity for the asset or the liability in relation to the normal market activity for the asset or liability (or similar assets or liabilities), then transactions or quoted prices may not accurately reflect fair value. In addition, if there is evidence that the transaction for the asset or liability is not orderly, the entity shall place little, if any weight on that transaction price as an indicator of fair value. This guidance also expanded certain disclosure requirements. This guidance was effective for periods ending after June 15, 2009, with early adoption permitted for periods ending after March 15, 2009. The Company elected to adopt this pronouncement effective for its interim period ending March 31, 2009, and its adoption did not have a material impact on the Company's consolidated financial condition or results of operations.

The Company reviews its securities measured at fair value and discusses the proper classification of such investments with investment advisors and others. Upon adoption of the accounting guidance regarding fair value measurement and at December 31, 2009, the Company determined that Level 1 securities included highly liquid, recent issue U.S. Treasuries and certain of its short-term investments held in highly liquid money market-type funds where it believes that quoted prices are available in an active market. The Company also determined that Level 1 securities at December 31, 2009 included

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

publicly traded equity securities acquired in the 2009 fourth quarter as part of a global natural resources investment strategy.

Where the Company believes that quoted market prices are not available or that the market is not active, fair values are estimated by using quoted prices of securities with similar characteristics, pricing models or matrix pricing and are generally classified as Level 2 securities. The Company determined that Level 2 securities included corporate bonds, mortgage backed securities, municipal bonds, asset backed securities, certain U.S. government and government agencies, non-U.S. government securities, TALF investments and TALF borrowings, certain short-term securities and certain other investments.

The Company determined that three Euro-denominated corporate bonds which invest in underlying portfolios of fixed income securities for which there is a low level of transparency around inputs to the valuation process should be classified within Level 3 of the valuation hierarchy. In addition, the Company determined that two mutual funds, included in other investments, which invest in underlying portfolios of fixed income securities for which there is a low level of transparency around inputs to the valuation process should be classified within Level 3 of the valuation hierarchy. These items were reclassified as Level 3 during the 2008 fourth quarter due to the significant dislocation in the credit markets during October and November 2008. The Company believes that the market for such investments, which are primarily investments in an underlying portfolio of structured bank loans, deteriorated in response to market conditions. As such, the inputs to the valuation process for these investments were determined to be less observable than in prior periods. The Company reviews the classification of its investments each quarter. In addition, Level 3 securities include a small number of premium-tax bonds.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the Company's financial assets and liabilities measured at fair value on a recurring basis by level:

	Fair Value Measurement Using:			
	Estimated Market Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
December 31, 2009:				
Assets measured at fair value:				
Fixed maturities: (1)				
Corporate bonds	\$ 3,134,088	\$	\$ 2,955,703	\$ 178,385
U.S. government and government agencies	1,553,672	466,779	1,086,893	
Mortgage backed securities	1,449,382		1,449,382	
Commercial mortgage backed securities	1,185,799		1,185,799	
Municipal bonds	957,752		957,752	
Non-U.S. government securities	752,215		752,215	
Asset backed securities	567,844		567,844	
Total	9,600,752	466,779	8,955,588	178,385
Short-term investments (1)	575,483	564,281	11,202	
TALF investments, at market value	250,265		250,265	
Other investments	95,374	36,374	9,332	49,668
Total assets measured at fair value	\$ 10,521,874	\$ 1,067,434	\$ 9,226,387	\$ 228,053
Liabilities measured at fair value:				
TALF borrowings, at market value	\$ 217,565	\$	\$ 217,565	\$
December 31, 2008:				
Assets measured at fair value:				
Fixed maturities: (1)				
Corporate bonds	\$ 2,019,373	\$	\$ 1,876,802	\$ 142,571
U.S. government and government agencies	1,463,897	241,851	1,222,046	
Mortgage backed securities	1,581,736		1,581,736	
Commercial mortgage backed securities	1,219,737		1,219,737	
Municipal bonds	965,966		965,966	
Non-U.S. government securities	527,972		527,972	
Asset backed securities	970,041		970,041	
Total	8,748,722	241,851	8,364,300	142,571
Short-term investments (1)	581,150	474,504	106,646	
Other investments	36,913		(3,426)	40,339
Total assets measured at fair value	\$ 9,366,785	\$ 716,355	\$ 8,467,520	\$ 182,910

(1)

In securities lending transactions, the Company receives collateral in excess of the fair value of the fixed maturities and short-term investments pledged under securities lending agreements. For purposes of this table, the Company has excluded the collateral received and reinvested at December 31, 2009 and December 31, 2008 of \$207.0 million and \$730.2 million, respectively, and included the \$212.8 million and \$728.1 million, respectively, of "fixed maturities and short-term investments pledged under securities lending agreements, at market value."

F-42

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents a reconciliation of the beginning and ending balances for all investments measured at fair value on a recurring basis using Level 3 inputs:

	Fair Value Measurements Using:		
	Significant Unobservable Inputs (Level 3)		
	Corporate Bonds	Other Investments	Total
Year Ended December 31, 2009:			
Beginning balance at January 1, 2009	\$ 142,571	\$ 40,339	\$ 182,910
Total gains or (losses) (realized/unrealized)			
Included in earnings (1)	2,395	(14,117)	(11,722)
Included in other comprehensive income	52,698	24,075	76,773
Purchases, issuances and settlements	(19,279)	(629)	(19,908)
Transfers in and/or out of Level 3			
Ending balance at December 31, 2009	\$ 178,385	\$ 49,668	\$ 228,053
Year Ended December 31, 2008:			
Beginning balance at January 1, 2008	\$ 3,752	\$ 11,504	\$ 15,256
Total gains or (losses) (realized/unrealized)			
Included in earnings (1)	(780)	757	(23)
Included in other comprehensive income		(2,660)	(2,660)
Purchases, issuances and settlements	2,803	(829)	1,974
Transfers in and/or out of Level 3	136,796	31,567	168,363
Ending balance at December 31, 2008	\$ 142,571	\$ 40,339	\$ 182,910

- (1) Losses on fixed maturities were recorded as a component of net investment income while losses on other investments were recorded in net realized losses.

The amount of total losses for 2009 included in earnings attributable to the change in unrealized gains or losses relating to assets still held at December 31, 2009 was \$2.6 million. The amount of total losses for 2008 included in earnings attributable to the change in unrealized gains or losses relating to assets still held at December 31, 2008 was de minimis.

Fair Value Measurements on a Non-Recurring Basis

The Company measures the fair value of certain assets on a non-recurring basis, generally quarterly, annually, or when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. These assets include investment funds accounted for using the equity method, investment in joint venture, certain other investments, goodwill and intangible assets, and long-lived assets. The Company uses a variety of techniques to measure the fair value of these assets when appropriate, as described below:

Investment funds accounted for using the equity method and Investment in joint venture and certain other investments. When the Company determines that the carrying value of these assets may not be recoverable, the Company records the assets at fair value with the loss recognized in income. In such cases, the Company measures the fair value of these assets using the techniques discussed above in " Fair Value Measurements on a Recurring Basis."

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Goodwill and intangible assets. The goodwill and intangible assets of acquired businesses, which totaled \$24.2 million and \$27.4 million, respectively, at December 31, 2009 and 2008, is included in "Other assets" in the Company's balance sheet and represents the difference between the purchase price and the fair value of the net tangible assets of the acquired businesses. The Company tests goodwill and intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable, but at least annually for goodwill. When the Company determines goodwill and intangible assets may be impaired, the Company uses techniques including discounted expected future cash flows, to measure fair value.

Long-Lived Assets. The Company tests its long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of a long-lived asset may not be recoverable.

9. Derivative Instruments

The Company's investment strategy allows for the use of derivative securities. The Company's derivative instruments are recorded on its consolidated balance sheets at market value. The market values of those derivatives are based on quoted market prices. All realized and unrealized contract gains and losses are reflected in the Company's results of operations.

The Company utilizes exchange traded U.S. Treasury note, Eurodollar and other futures contracts and commodity futures to manage portfolio duration or replicate investment positions in its portfolios. In addition, certain of the Company's corporate bonds are managed in a global bond portfolio which incorporates the use of foreign currency forward contracts which are intended to provide an economic hedge against foreign currency movements on the portfolio's non-U.S. Dollar denominated holdings.

In addition, the Company purchases to-be-announced mortgage backed securities ("TBAs") as part of its investment strategy. TBAs represent commitments to purchase a future issuance of agency mortgage backed securities. For the period between purchase of a TBA and issuance of the underlying security, the Company's position is accounted for as a derivative. The Company purchases TBAs in both long and short positions to enhance investment performance and as part of its overall investment strategy.

The Company did not hold any derivatives which were designated as hedging instruments at December 31, 2009 or December 31, 2008.

The following table summarizes information on the balance sheet locations, market values and notional values of the Company's derivative instruments at December 31, 2009:

	Balance Sheet Location	Asset Derivatives Estimated		Liability Derivatives Estimated	
		Market Value	Notional Value	Market Value	Notional Value
Derivatives not designated as hedging instruments					
Futures contracts	Other investments	\$ 577	\$ 472,904	\$ (208)	\$ 513,034
Foreign currency forward contracts	Other investments	757	73,340	(12,408)	310,030
TBAs	Fixed maturities	11,070	11,000	(616)	600
Other	Other investments	26	1,975	(1,010)	143,870
Total		\$ 12,430		\$ (14,242)	

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table summarizes information on the balance sheet locations, market values and notional values of the Company's derivative instruments at December 31, 2008:

	Balance Sheet Location	Asset Derivatives Estimated		Liability Derivatives Estimated	
		Market Value	Notional Value	Market Value	Notional Value
Derivatives not designated as hedging instruments					
Futures contracts	Other investments	\$ 647	\$ 363,297	\$ (1,541)	\$ 556,268
Foreign currency forward contracts	Other investments	3,485	15,294	(14,332)	135,426
Total		\$ 4,132		\$ (15,873)	

The following table summarizes derivative instrument activity in the consolidated statements of operations for the year ended December 31, 2009:

	Location of Gain or (Loss) Recognized in Income on Derivative	Year Ended December 31, 2009
Derivatives not designated as hedging instruments		
Futures contracts	Net realized gains (losses)	\$ 3,791
Foreign currency forward contracts	Net realized gains (losses)	(5,798)
TBAs	Net realized gains (losses)	1,154
Other	Net realized gains (losses)	389
Total		\$ (464)

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

10. Other Comprehensive Income (Loss)

Following are the related tax effects allocated to each component of other comprehensive income (loss):

	Before Tax Amount	Tax Expense (Benefit)	Net of Tax Amount
<i>Year Ended December 31, 2009</i>			
Unrealized appreciation in value of investments:			
Unrealized holding gains arising during year	\$ 585,278	\$ 11,094	\$ 574,184
Portion of other-than-temporary impairment losses recognized in other comprehensive income	(81,376)		(81,376)
Less reclassification of net realized gains included in net income	54,655	6,077	48,578
Foreign currency translation adjustments	13,555	2,196	11,359
Other comprehensive income	\$ 462,802	\$ 7,213	\$ 455,589
<i>Year Ended December 31, 2008</i>			
Unrealized appreciation (decline) in value of investments:			
Unrealized holding losses arising during year	\$ (568,422)	\$ 13,821	\$ (582,243)
Portion of other-than-temporary impairment losses recognized in other comprehensive income			
Less reclassification of net realized losses included in net income	(201,911)	5,054	(206,965)
Foreign currency translation adjustments	(38,079)	(2,539)	(35,540)
Other comprehensive income (loss)	\$ (404,590)	\$ 6,228	\$ (410,818)
<i>Year Ended December 31, 2007</i>			
Unrealized appreciation in value of investments:			
Unrealized holding gains arising during year	\$ 143,105	\$ 8,322	\$ 134,783
Portion of other-than-temporary impairment losses recognized in other comprehensive income			
Less reclassification of net realized gains included in net income	40,182	(1,944)	42,126
Foreign currency translation adjustments	14,920	1,777	13,143
Other comprehensive income	\$ 117,843	\$ 12,043	\$ 105,800

11. Income Taxes

ACGL is incorporated under the laws of Bermuda and, under current Bermuda law, is not obligated to pay any taxes in Bermuda based upon income or capital gains. The Company has received a written undertaking from the Minister of Finance in Bermuda under the Exempted Undertakings Tax Protection Act 1966 that, in the event that any legislation is enacted in Bermuda imposing any tax computed on profits, income, gain or appreciation on any capital asset, or any tax in the nature of estate duty or inheritance tax, such tax will not be applicable to ACGL or any of its operations until March 28, 2016. This undertaking does not, however, prevent the imposition of taxes on any person ordinarily resident in Bermuda or any company in respect of its ownership of real property or leasehold interests in Bermuda.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

ACGL and its non-U.S. subsidiaries will be subject to U.S. federal income tax only to the extent that they derive U.S. source income that is subject to U.S. withholding tax or income that is effectively connected with the conduct of a trade or business within the U.S. and is not exempt from U.S. tax under an applicable income tax treaty with the U.S. ACGL and its non-U.S. subsidiaries will be subject to a withholding tax on dividends from U.S. investments and interest from certain U.S. payors (subject to reduction by any applicable income tax treaty). ACGL and its non-U.S. subsidiaries intend to conduct their operations in a manner that will not cause them to be treated as engaged in a trade or business in the United States and, therefore, will not be required to pay U.S. federal income taxes (other than U.S. excise taxes on insurance and reinsurance premium and withholding taxes on dividends and certain other U.S. source investment income). However, because there is uncertainty as to the activities which constitute being engaged in a trade or business within the United States, there can be no assurances that the U.S. Internal Revenue Service will not contend successfully that ACGL or its non-U.S. subsidiaries are engaged in a trade or business in the United States. If ACGL or any of its non-U.S. subsidiaries were subject to U.S. income tax, ACGL's shareholders' equity and earnings could be materially adversely affected. ACGL has subsidiaries and branches that operate in various jurisdictions around the world that are subject to tax in the jurisdictions in which they operate. The significant jurisdictions in which ACGL's subsidiaries and branches are subject to tax are the United States, United Kingdom, Ireland, Canada, Switzerland and Denmark.

The components of income taxes attributable to operations were as follows:

	Years Ended December 31,		
	2009	2008	2007
Current expense:			
U.S. Federal	\$ 20,243	\$ 16,704	\$ 13,487
U.S. State	742	825	629
Non-U.S.	2,627	5,631	6,886
	23,612	23,160	21,002
Deferred benefit:			
U.S. Federal	(1,485)	(7,740)	(2,382)
Non-U.S.	(1,419)	(1,881)	(3,019)
	(2,904)	(9,621)	(5,401)
Income tax expense	\$ 20,708	\$ 13,539	\$ 15,601

The expected tax provision computed on pre-tax income at the weighted average tax rate has been calculated as the sum of the pre-tax income in each jurisdiction multiplied by that jurisdiction's

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

applicable statutory tax rate. A reconciliation of the difference between the provision for income taxes and the expected tax provision at the weighted average tax rate follows:

	Years Ended December 31,		
	2009	2008	2007
Expected income tax expense computed on pre-tax income at weighted average income tax rate	\$ 31,162	\$ 19,854	\$ 25,894
Addition (reduction) in income tax expense (benefit) resulting from:			
Valuation allowance			(1,358)
Tax-exempt investment income	(8,911)	(11,403)	(9,703)
Meals and entertainment	462	641	505
State taxes, net of U.S. federal tax benefit	506	536	409
U.S. operations' foreign taxes, net of U.S. federal tax benefit	(983)	2,133	
Reorganization of foreign branch		589	
Prior year adjustment	(1,992)	253	(512)
Other	464	936	366
Income tax expense	\$ 20,708	\$ 13,539	\$ 15,601

The Company has net operating loss carryforwards in its U.S. operating subsidiaries totaling \$5.0 million at December 31, 2009. Such net operating losses are currently available to offset future taxable income of the subsidiaries. Under applicable law, the U.S. net operating loss carryforwards expire between 2018 and 2020. The Company also has a foreign tax credit carryforward of \$2.3 million which will expire between 2017 and 2018.

On November 20, 2001, the Company underwent an ownership change for U.S. federal income tax purposes as a result of the investment led by investment funds associated with Warburg Pincus LLC ("Warburg Pincus") and Hellman and Friedman LLC ("Hellman & Friedman"). As a result of this ownership change, limitations have been imposed upon the utilization by the Company's U.S. operating subsidiaries of existing net operating losses. Utilization by such subsidiaries of the net operating losses and certain of the AMT credit carryforward is limited to approximately \$5.1 million per year in accordance with Section 382 of the Internal Revenue Code of 1986 as amended (the "Code").

The Company's Danish subsidiary has a net operating loss carryforward of \$2.3 million which can be carried forward without expiration. The Company's Irish subsidiary has a net operating loss carryforward of \$2.2 million which can be carried forward without expiration.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Deferred income tax assets and liabilities reflect temporary differences based on enacted tax rates between the carrying amounts of assets and liabilities for financial reporting and income tax purposes. Significant components of the Company's deferred income tax assets and liabilities were as follows:

	December 31,	
	2009	2008
Deferred income tax assets:		
Net operating loss	\$ 2,601	\$ 4,495
Deferred ceding commission	9,548	9,969
AMT credit carryforward		1,549
Discounting of net loss reserves	35,657	33,607
Net unearned premium reserve	13,210	13,742
Compensation liabilities	21,693	20,676
Other than temporary impairment on securities	259	899
Foreign tax credit carryforward	2,283	1,494
Net unrealized foreign exchange losses		561
Interest expense	3,161	294
Other, net	4,807	3,123
Total deferred tax assets	93,219	90,409
Deferred income tax liabilities:		
Depreciation and amortization	(3,954)	(2,178)
Deferred acquisition costs, net	(2,196)	(3,142)
Deposit accounting liability	(5,090)	(5,315)
Foreign transaction exchange gains	(1,350)	(419)
Net unrealized foreign exchange gains	(1,634)	
Net unrealized appreciation of investments	(20,876)	(16,662)
Other, net	(1,831)	(2,501)
Total deferred tax liabilities	(36,931)	(30,217)
Net deferred income tax asset	\$ 56,288	\$ 60,192

In September 2006, the FASB issued guidance regarding the accounting for uncertainty in income taxes, which was an interpretation of previously issued guidance regarding the accounting for income taxes. Such guidance prescribes a "more likely than not" threshold for the financial statement recognition of a tax position taken or expected to be taken in a tax return, assuming the relevant tax authority has full knowledge of all relevant information. The amount recognized represents the largest amount of tax benefit that is greater than 50% likely of being ultimately realized. A liability is recognized for any benefit claimed, or expected to be claimed, in a tax return in excess of the benefit recorded in the financial statements, along with any interest and penalty (if applicable) on the excess. The Company recognizes interest and penalties relating to unrecognized tax benefits in the provision for income taxes.

The Company adopted the provisions of the new guidance on January 1, 2007. As prescribed, the cumulative effects of applying the new guidance is reported as an adjustment to the opening balance of retained earnings. As a result of the adoption on January 1, 2007, the Company's retained earnings remained unchanged. As of December 31, 2009 and 2008, the Company's total unrecognized tax benefits, including interest and penalties, were nil.

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

The Company or its subsidiaries or branches files income tax returns in the U.S. federal jurisdiction and various state, local and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state, local, or non-U.S. income tax examination for years before 2006. During 2008, the U.S. Internal Revenue Service closed its examination of the Company's U.S. income tax returns for the 2004 tax year with no change.

In addition to unrecognized tax benefits, the Company provides a valuation allowance to reduce certain deferred tax assets to an amount which management expects to more likely than not be realized. As of December 31, 2009 and 2008, the Company's valuation allowance was nil.

The Company paid \$31.4 million, \$11.4 million, and \$3.9 million for income taxes, net of recoveries, in 2009, 2008 and 2007, respectively. As of December 31, 2009, the Company's current income tax recoverable (included in "Other assets") was \$12.5 million.

Federal Excise Taxes

The United States also imposes an excise tax on insurance and reinsurance premiums paid to non-U.S. insurers or reinsurers with respect to risks located in the United States. The rates of tax, unless reduced by an applicable U.S. tax treaty, are four percent for non-life insurance premiums and one percent for life insurance and all reinsurance premiums. The Company incurs federal excise taxes on certain of its reinsurance transactions, including amounts ceded through intercompany transactions. For 2009, 2008 and 2007, the Company incurred approximately \$12.8 million, \$12.8 million and \$14.3 million, respectively, of federal excise taxes. Such amounts are reflected as acquisition expenses in the Company's consolidated statements of income.

12. Transactions with Related Parties

The Company made an investment of \$50.0 million in Aeolus LP ("Aeolus") in 2006. Aeolus operates as an unrated reinsurance platform that provides property catastrophe protection to insurers and reinsurers on both an ultimate net loss and industry loss warranty basis. In return for its investment, included in "Other investments" on the Company's balance sheet, the Company received an approximately 4.9% preferred interest in Aeolus and a pro rata share of certain founders' interests. The investment is accounted for using the equity method. The Company made its investment in Aeolus on the same economic terms as a fund affiliated with Warburg Pincus, which has invested \$350 million in Aeolus. Funds affiliated with Warburg Pincus owned 1.1% of the Company's outstanding voting shares as of December 31, 2009. In addition, one of the founders of Aeolus is Peter Appel, former President and CEO and a former director of the Company. During 2009, the Company received a distribution of \$14.0 million from Aeolus as part of a repurchase agreement. Following such receipt, the Company's preferred interest percentage decreased to approximately 4.4%.

13. Commitments and Contingencies

Concentrations of Credit Risk

The creditworthiness of a counterparty is evaluated by the Company, taking into account credit ratings assigned by independent agencies. The credit approval process involves an assessment of factors, including, among others, the counterparty, country and industry credit exposure limits. Collateral may be required, at the discretion of the Company, on certain transactions based on the creditworthiness of the counterparty.

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

The areas where significant concentrations of credit risk may exist include unpaid losses and loss adjustment expenses recoverable, prepaid reinsurance premiums and paid losses and loss adjustment expenses recoverable net of reinsurance balances payable (collectively, "reinsurance recoverables"), investments and cash and cash equivalent balances. The Company's reinsurance recoverables at December 31, 2009 and 2008 amounted to \$1.84 billion and \$1.96 billion, respectively, and primarily resulted from reinsurance arrangements entered into in the course of its operations. A credit exposure exists with respect to reinsurance recoverables as they may become uncollectible. The Company manages its credit risk in its reinsurance relationships by transacting with reinsurers that it considers financially sound and, if necessary, the Company may hold collateral in the form of funds, trust accounts and/or irrevocable letters of credit. This collateral can be drawn on for amounts that remain unpaid beyond specified time periods on an individual reinsurer basis.

In addition, the Company underwrites a significant amount of its business through brokers and a credit risk exists should any of these brokers be unable to fulfill their contractual obligations with respect to the payments of insurance and reinsurance balances owed to the Company. During 2009, approximately 15.6% and 21.4% of the Company's consolidated gross written premiums were generated from or placed by Marsh & McLennan Companies and its subsidiaries and AON Corporation and its subsidiaries, respectively, compared to approximately 17.0% and 15.3% for 2008, respectively, and 19.6% and 16.4% for 2007, respectively. No other broker and no one insured or reinsured accounted for more than 10% of gross premiums written for 2009, 2008 and 2007.

The Company's available for sale investment portfolio is managed in accordance with guidelines that have been tailored to meet specific investment strategies, including standards of diversification, which limit the allowable holdings of any single issue. There were no investments in any entity in excess of 10% of the Company's shareholders' equity at December 31, 2009 other than investments issued or guaranteed by the United States government or its agencies. The Company's unfunded investment commitments relating to investment funds accounted for using the equity method and other investments totaled \$117.2 million at December 31, 2009.

Variable Interest Entities

The Company concluded that, under FASB guidance regarding the consolidation of variable interest entities, that it is required to consolidate the assets, liabilities and results of operations (if any) of a certain managing general agency in which one of its subsidiaries has an investment. Such agency ceased producing business in 1999 and is currently running-off its operations. Based on current information, there are no assets or liabilities of such agency required to be reflected on the face of the Company's consolidated financial statements that are not, or have not been previously, otherwise reflected therein.

On December 29, 2005, Arch Re Bermuda entered into a quota share reinsurance treaty with Flatiron, a Bermuda reinsurance company, pursuant to which Flatiron is assuming a 45% quota share (the "Treaty") of certain lines of property and marine business underwritten by Arch Re Bermuda for unaffiliated third parties for the 2006 and 2007 underwriting years (January 1, 2006 to December 31, 2007). On December 31, 2007, the Treaty expired by its terms (see Note 4). Under the guidance governing accounting for VIEs, the Company has determined that Flatiron is a variable interest entity. Arch Re Bermuda is not the primary beneficiary of Flatiron and, as such, the Company is not required to consolidate the assets, liabilities and results of operations of Flatiron. Under the amended guidance governing accounting for VIEs, which is effective January 1, 2010, the Company does not expect that Flatiron will be considered a VIE. See Note 2 (n), "Recent Accounting Pronouncements," for information on the amended guidance.

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Letter of Credit and Revolving Credit Facilities

As of December 31, 2009, the Company had a \$300 million unsecured revolving loan and letter of credit facility and a \$1.0 billion secured letter of credit facility (the "Credit Agreement"). Under the terms of the Credit Agreement, Arch Re U.S. is limited to issuing \$100 million of unsecured letters of credit as part of the \$300 million unsecured revolving loan. Borrowings of revolving loans may be made by ACGL and Arch Re U.S. at a variable rate based on LIBOR or an alternative base rate at the option of the Company. Secured letters of credit are available for issuance on behalf of the Company's insurance and reinsurance subsidiaries. The Credit Agreement and related documents are structured such that each party that requests a letter of credit or borrowing does so only for itself and for only its own obligations. Issuance of letters of credit and borrowings under the Credit Agreement are subject to the Company's compliance with certain covenants and conditions, including absence of a material adverse change. These covenants require, among other things, that the Company maintain a debt to total capital ratio of not greater than 0.35 to 1 and shareholders' equity in excess of \$1.95 billion plus 25% of future aggregate net income for each quarterly period (not including any future net losses) beginning after June 30, 2006 and 25% of future aggregate proceeds from the issuance of common or preferred equity and that the Company's principal insurance and reinsurance subsidiaries maintain at least a "B++" rating from A.M. Best. In addition, certain of the Company's subsidiaries which are party to the Credit Agreement are required to maintain minimum shareholders' equity levels. The Company was in compliance with all covenants contained in the Credit Agreement at December 31, 2009. The Credit Agreement expires on August 30, 2011.

Including the secured letter of credit portion of the Credit Agreement, the Company has access to letter of credit facilities for up to a total of \$1.45 billion. Arch Re Bermuda also has access to other letter of credit facilities, some of which are available on a limited basis and for limited purposes (together with the secured portion of the Credit Agreement and these letter of credit facilities, the "LOC Facilities"). The principal purpose of the LOC Facilities is to issue, as required, evergreen standby letters of credit in favor of primary insurance or reinsurance counterparties with which the Company has entered into reinsurance arrangements to ensure that such counterparties are permitted to take credit for reinsurance obtained from the Company's reinsurance subsidiaries in United States jurisdictions where such subsidiaries are not licensed or otherwise admitted as an insurer, as required under insurance regulations in the United States, and to comply with requirements of Lloyd's of London in connection with qualifying quota share and other arrangements. The amount of letters of credit issued is driven by, among other things, the timing and payment of catastrophe losses, loss development of existing reserves, the payment pattern of such reserves, the further expansion of the Company's business and the loss experience of such business. When issued, certain letters of credit are secured by a portion of the Company's investment portfolio. In addition, the LOC Facilities also require the maintenance of certain covenants, which the Company was in compliance with at December 31, 2009. At such date, the Company had approximately \$775.7 million in outstanding letters of credit under the LOC Facilities, which were secured by investments totaling \$907.6 million. In May 2008, the Company borrowed \$100.0 million under the Credit Agreement at a Company-selected variable interest rate that is based on 1 month, 3 month or 6 month reset option terms and their corresponding term LIBOR rates plus 27.5 basis points. The proceeds from such borrowings, which are repayable in August 2011, were contributed as additional share capital to Arch Re Bermuda and used to fund the investment in Gulf Re (see Note 6).

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

TALF Program

TALF provides secured financing for asset-backed securities backed by certain types of consumer and small business loans and for legacy commercial mortgage-backed securities. TALF financing is non-recourse to the Company, except in certain limited instances, and is collateralized by the purchased securities and provides financing for the purchase price of the securities, less a 'haircut' that varies based on the type of collateral. The Company can deliver the collateralized securities to a special purpose vehicle created by the FRBNY in full defeasance of the borrowings.

As of December 31, 2009, the Company had \$250.3 million of securities under TALF, consisting of 13 individual TALF investments, which are reflected as "TALF investments, at market value" and \$217.6 million of secured financing from the FRBNY which is reflected as "TALF borrowings, at market value." The maturity dates for the TALF borrowings range from July 2012 to September 2014, with interest rates that range from approximately 1.2% to 3.9% based on either variable or fixed interest rates depending on the related TALF investments. See Note 7, "Investment Information TALF Program," for additional information.

Leases and Purchase Obligations

At December 31, 2009, the future minimum rental commitments, exclusive of escalation clauses and maintenance costs and net of rental income, for all of the Company's operating leases with remaining non-cancelable terms in excess of one year are as follows:

2010	\$ 15,819
2011	15,906
2012	13,868
2013	12,833
2014	11,863
Thereafter	65,495
Total	\$ 135,784

All of these leases are for the rental of office space, with expiration terms that range from 2011 to 2024. Rental expense, net of income from subleases, was approximately \$16.9 million, \$17.5 million and \$14.8 million for 2009, 2008 and 2007, respectively.

The Company has also entered into certain agreements which commit the Company to purchase goods or services, primarily related to software and computerized systems. Such purchase obligations were approximately \$22.0 million and \$28.5 million at December 31, 2009 and 2008, respectively.

Employment and Other Arrangements

At December 31, 2009, the Company has entered into employment agreements with certain of its executive officers for periods extending up to November 2012. Such employment arrangements provide for compensation in the form of base salary, annual bonus, share-based awards, participation in the Company's employee benefit programs and the reimbursements of expenses.

WTM Re Transaction and Related Contingencies

On May 5, 2000, the Company sold the prior reinsurance operations of Arch Re U.S. pursuant to an agreement entered into as of January 10, 2000 with White Mountains Reinsurance Company of America, formerly known as Folksamerica Reinsurance Company, and a related holding company

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(collectively, "WTM Re"). WTM Re assumed Arch Re U.S.'s liabilities under the reinsurance agreements transferred in the asset sale and Arch Re U.S. transferred to WTM Re assets estimated in an aggregate amount equal in book value to the book value of the liabilities assumed. The WTM Re transaction was structured as a transfer and assumption agreement (and not reinsurance) and, accordingly, the loss reserves (and any related reinsurance recoverables) relating to the transferred business are not included as assets or liabilities on the Company's balance sheet. WTM Re assumed Arch Re U.S.'s rights and obligations under the reinsurance agreements transferred in the asset sale. The reinsureds under such agreements were notified that WTM Re had assumed Arch Re U.S.'s obligations and that, unless the reinsureds object to the assumption, Arch Re U.S. will be released from its obligations to those reinsured. None of such reinsureds objected to the assumption. However, Arch Re U.S. will continue to be liable under those reinsurance agreements if the notice is found not to be an effective release by the reinsureds. WTM Re has agreed to indemnify the Company for any losses arising out of the reinsurance agreements transferred to WTM Re in the asset sale. However, in the event that WTM Re refuses or is unable to perform its obligations to the Company, Arch Re U.S. may incur losses relating to the reinsurance agreements transferred in the asset sale. WTM Re's A.M. Best rating was "A-" (Excellent) at December 31, 2009. WTM Re reported policyholders' surplus of \$708.8 million at December 31, 2008.

Under the terms of the agreement, in 2000, the Company had also purchased reinsurance protection covering the Company's transferred aviation business to reduce the net financial loss to WTM Re on any large commercial airline catastrophe to \$5.4 million, net of reinstatement premiums. Although the Company believes that any such net financial loss will not exceed \$5.4 million, the Company has agreed to reimburse WTM Re if a loss is incurred that exceeds \$5.4 million for aviation losses under certain circumstances prior to May 5, 2003. The Company also made representations and warranties to WTM Re about the Company and the business transferred to WTM Re for which the Company retains exposure for certain periods, and made certain other agreements. In addition, the Company retained its tax and employee benefit liabilities and other liabilities not assumed by WTM Re, including all liabilities not arising under reinsurance agreements transferred to WTM Re in the asset sale and all liabilities (other than liabilities arising under reinsurance agreements) arising out of or relating to a certain managing underwriting agency. Although WTM Re has not asserted that any amount is currently due under any of the indemnities provided by the Company under the asset purchase agreement, WTM Re has previously indicated a potential indemnity claim under the agreement in the event of the occurrence of certain future events. Based on all available information, the Company has denied the validity of any such potential claim.

14. Senior Notes

On May 4, 2004, ACGL completed a public offering of \$300 million principal amount of 7.35% senior notes ("Senior Notes") due May 1, 2034 and received net proceeds of \$296.4 million. ACGL used \$200 million of the net proceeds to repay all amounts outstanding under a revolving credit agreement. The Senior Notes are ACGL's senior unsecured obligations and rank equally with all of its existing and future senior unsecured indebtedness. Interest payments on the Senior Notes are due on May 1st and November 1st of each year. ACGL may redeem the Senior Notes at any time and from time to time, in whole or in part, at a "make-whole" redemption price. For 2009, 2008 and 2007, interest expense on the Senior Notes was \$22.1 million. The market value of the Senior Notes at December 31, 2009 and 2008 was \$298.6 million and \$246.1 million, respectively.

During 2009, 2008 and 2007, the Company made interest payments of \$24.6 million, \$23.8 million and \$22.0 million, respectively, related to its Senior Notes and other financing arrangements discussed in Note 13.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

15. Share Capital*Authorized and Issued*

The authorized share capital of the Company consists of 200,000,000 Common Shares, par value of \$0.01 per share, and 50,000,000 Preferred Shares, par value of \$0.01 per share.

Common Shares

Changes in the Company's outstanding Common Shares are reflected in the table below:

	Years Ended December 31,		
	2009	2008	2007
Common Shares:			
Balance, beginning of year	60,511,974	67,318,466	74,270,466
Shares issued (1)	527,953	695,769	523,723
Restricted shares issued, net of cancellations	519,423	17,345	329,057
Shares repurchased and retired (2)	(6,797,672)	(7,519,606)	(7,804,780)
Balance, end of year	54,761,678	60,511,974	67,318,466

- (1) Includes shares issued from the exercise of stock options and shares issued from the employee share purchase plan.
- (2) Includes shares repurchased and retired from the share repurchase plan.

Share Repurchases

The board of directors of ACGL has authorized the investment of up to \$2.5 billion in ACGL's common shares through a share repurchase program. Such amount consisted of a \$1.0 billion authorization in February 2007, a \$500 million authorization in May 2008, and a \$1.0 billion authorization in November 2009. Repurchases under the program may be effected from time to time in open market or privately negotiated transactions through December 2011. Since the inception of the share repurchase program, ACGL has repurchased approximately 22.0 million common shares for an aggregate purchase price of \$1.51 billion. During 2009, ACGL repurchased approximately 6.7 million common shares for an aggregate purchase price of \$458.4 million, compared to 7.5 million shares repurchased for an aggregate purchase price of \$513.1 million during 2008, and 7.8 million shares repurchased for an aggregate purchase price of \$537.1 million during 2007. Weighted average shares outstanding for 2009 were reduced by 16.2 million shares, compared to 12.9 million shares for 2008, and 3.3 million shares for 2007.

At December 31, 2009, approximately \$991.4 million of share repurchases were available under the program. The timing and amount of the repurchase transactions under this program will depend on a variety of factors, including market conditions and corporate and regulatory considerations. In connection with the share repurchase program, the Warburg Pincus funds waived their rights relating to share repurchases under its shareholders agreement with ACGL for all repurchases of common shares by ACGL under the share repurchase program in open market transactions and certain privately negotiated transactions.

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

Long Term Incentive and Share Award Plans

On May 11, 2007, following shareholder approval, the Company adopted the 2007 Employee Share Purchase Plan (the "ESPP"). The purpose of the ESPP is to give employees of ACGL and its subsidiaries an opportunity to purchase common shares through payroll deductions, thereby encouraging employees to share in the economic growth and success of ACGL and its subsidiaries. The ESPP is designed to qualify as an "employee share purchase plan" under Section 423 of the Code. A total of 750,000 common shares are reserved for issuance under the ESPP. The ESPP provides for consecutive six-month offering periods (or other periods of not more than 27 months as determined by the compensation committee) under which participating employees can elect to have up to 20% of their total compensation withheld and applied to the purchase of common shares of the Company at the end of the period. Unless otherwise determined by the compensation committee before an offering period commences, (1) the purchase price will be 85% of the fair market value of the common shares at the beginning of the offering period; and (2) the maximum number of common shares that may be purchased by an employee in any offering period is 3,000 shares. In addition, applicable Code limitations specify, in general, that a participant's right to purchase stock under the ESPP cannot accumulate at a rate in excess of \$25,000 (based on the value at the beginning of the applicable offering periods) per calendar year.

On May 11, 2007, following shareholder approval, the Company adopted the 2007 Long Term Incentive and Share Award Plan (the "2007 Plan"). The 2007 Plan is intended to provide for competitive compensation opportunities, to encourage long-term service, to recognize individual contributions and reward achievement of performance goals and to promote the creation of long-term value for shareholders by aligning the interests of such persons with those of shareholders. The 2007 Plan provides for the grant to eligible employees and directors stock options, stock appreciation rights, restricted shares, restricted share units payable in common shares or cash, share awards in lieu of cash awards, dividend equivalents and other share-based awards. The 2007 Plan also provides the Company's non-employee directors with the opportunity to receive the annual retainer fee for Board service in common shares.

Following shareholder approval on May 11, 2007, the 2005 Long Term Incentive and Share Award Plan (the "2005 Plan"), whose terms are substantially similar to the 2007 Plan, was merged into the 2007 Plan. As of the effective date, the 1,533,527 remaining shares available for issuance under the 2005 Plan were transferred into the 2007 Plan. No additional grants will be made thereafter under the 2005 Plan.

Grants which were outstanding at May 11, 2007 under the 2005 Plan will continue in accordance with their original terms (subject to such amendments as the compensation committee determines appropriate, consistent with the terms of the 2005 Plan), and the shares with respect to such outstanding grants will be issued or transferred under the 2007 Plan. The number of common shares reserved for issuance under the 2007 Plan, subject to anti-dilution adjustments in the event of certain changes in the Company's capital structure, is equal to the sum of (i) 2,500,000 and (ii) the number of common shares subject to outstanding grants under the 2005 Plan as of the effective date as well as common shares remaining available for issuance under the 2005 Plan but not subject to previously exercised or vested grants as of the effective date, except that no more than 2,000,000 common shares may be issued as incentive stock options under Section 422 of the Code. At December 31, 2009, approximately 2,066,759 shares are available for grant under the 2007 Plan.

In June 2002, following shareholder approval, the Company adopted the 2002 Long Term Incentive and Share Award Plan (the "2002 Plan"). An aggregate of 3,165,830 Common Shares has been

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

reserved for issuance under the 2002 Plan. The 2002 Plan provides for the grant to eligible employees and directors of stock options, stock appreciation rights, restricted shares, restricted share units payable in Common Shares or cash, share awards in lieu of cash awards, dividend equivalents and other share-based awards. The 2002 Plan provides the Company's non-employee directors with the opportunity to receive their annual retainer fee for service as a director in Common Shares. As of December 31, 2009, approximately 18,584 shares are available for grant under the 2002 Plan.

With respect to certain subsidiaries, the Company may withhold, or require a participant to remit to the Company, an amount sufficient to satisfy any federal, state or local withholding tax requirements associated with awards under the Company's share award plans. This includes the authority to withhold or receive shares or other property and to make cash payments in respect thereof.

Stock Option and Stock Appreciation Rights

The Company generally issues stock options and stock appreciation rights to eligible employees, with exercise prices equal to the fair market values of the Company's Common Shares on the grant dates. Such grants generally vest over a three year period with one-third vesting on the first, second and third anniversaries of the grant date. Option awards have a 10 year contractual life. Refer to Note 2(1) for details related to the Company's accounting for stock options.

The Company recorded after-tax share-based compensation expense of \$4.8 million related to stock option awards for 2009, net of a tax benefit of \$1.3 million, compared to \$7.2 million related to stock option awards for 2008, net of a tax benefit of \$2.1 million, and \$7.2 million related to stock option awards for 2007, net of a tax benefit of \$1.8 million. As of December 31, 2009, there was approximately \$6.8 million of unrecognized compensation cost related to nonvested stock options. Such cost is expected to be recognized over a weighted average period of 1.7 years.

For purposes of determining estimated market value, the Company has computed the estimated market values of share-based compensation related to stock options using the Black-Scholes option valuation model and has applied the assumptions set forth in the following table. As described above, stock options generally vest over a three year period with one-third vesting on the first, second and third anniversaries of the grant date. For options granted during 2007, the expected life assumption was based on the vesting period, the ten year contractual term of the option awards, the historical share option exercise experience, peer data and guidance from the Securities and Exchange Commission as contained in Staff Accounting Bulletin No. 107 permitting the initial application of a "simplified" method for options granted, which is based on the average of the vesting term and the contractual term of the option. For options granted during 2008 and 2009 the expected life assumption was based on an expected term analysis which incorporated the Company's historical share option exercise experience. The Company based its estimate of expected volatility for options granted during 2009 on daily historical trading data of its common shares from September 20, 2002, the date marking the completion of the Company's transition as a worldwide insurance and reinsurance company. For options granted

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

during 2008 and 2007, the Company based its volatility estimate under the same method used for 2009, using the period from September 20, 2002 through the last day of the applicable period.

	Years Ended December 31,		
	2009	2008	2007
Dividend yield	0.0%	0.0%	0.0%
Expected volatility	26.2%	20.4%	19.6%
Risk free interest rate	2.6%	3.4%	5.0%
Expected option life	5.8 years	5.7 years	6.0 years

The Black-Scholes option pricing model requires the input of highly subjective assumptions. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models may not provide a reliable single measure of the fair value of its employee stock options. In addition, management will continue to assess the assumptions and methodologies used to calculate estimated fair value of share-based compensation. Circumstances may change and additional data may become available over time, which result in changes to these assumptions and methodologies, and which could materially impact the Company's fair value determination.

A summary of option activity under the Company's Long Term Incentive and Share Award Plans during 2009 is presented below:

	Year Ended December 31, 2009	
	Number of Options	Weighted Average Exercise Price
Outstanding, beginning of year	5,131,135	\$ 35.58
Granted	378,794	57.74
Exercised	(470,177)	25.84
Forfeited or expired	(23,648)	65.72
Outstanding, end of period	5,016,104	38.03
Exercisable, end of period	4,337,722	34.11

The weighted average grant-date fair value of options granted during 2009, 2008 and 2007 was \$17.68, \$19.07 and \$22.48, respectively. The aggregate intrinsic value of options exercised during 2009, 2008 and 2007 was approximately \$20.2 million, \$22.6 million, and \$20.0 million, respectively and represents the difference between the exercise price of the option and the closing market price of the Company's common shares on the exercise dates.

The aggregate intrinsic value of the Company's outstanding and exercisable stock options at December 31, 2009 was \$168.2 million and \$162.4 million, respectively. The weighted average remaining contractual life of the Company's outstanding and exercisable stock options at December 31, 2009 was 4.2 years and 3.5 years, respectively. During 2009, the Company received proceeds of \$11.8 million from the exercise of stock options and recognized a tax benefit of \$5.1 million from the exercise of such options.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Restricted Common Shares and Restricted Units

The Company also issues restricted share and unit awards to eligible employees and directors, for which the fair value is equal to the fair market values of the Company's Common Shares on the grant dates. Compensation equal to the fair value of the shares at the measurement date is amortized and charged to income over the requisite service period, which is generally the vesting period unless the employee is retirement eligible. Restricted share and unit awards generally vest over a three year period with one-third vesting on the first, second and third anniversaries of the grant date. Refer to Note 2(1) for details related to the Company's accounting for restricted share and unit awards.

The Company recorded \$15.8 million of share-based compensation expense, net of a tax benefit of \$4.5 million, related to restricted share and unit awards for 2009, compared to \$16.0 million, net of a tax benefit of \$4.1 million, for 2008 and \$12.9 million, net of a tax benefit of \$2.3 million, for 2007. As of December 31, 2009, there were \$13.5 million and \$9.0 million, respectively, of unrecognized compensation costs related to unvested restricted share and unit awards which are expected to be recognized over a weighted average period of 1.8 years and 1.4 years, respectively.

A summary of restricted share and unit activity under the Company's Long Term Incentive and Share Award Plans for 2009 is presented below:

	Restricted Common Shares	Restricted Unit Awards
Non-Vested Shares:		
Unvested balance, beginning of year	249,312	412,622
Granted	349,218	30,905
Vested	(162,159)	(177,521)
Forfeited	(7,316)	(4,994)
Unvested balance, end of year	429,055	261,012
Weighted Average Grant Date Fair Value:		
Unvested balance, beginning of year	\$ 65.58	
Granted	\$ 57.73	
Vested	\$ 64.06	
Forfeited	\$ 62.57	
Unvested balance, end of year	\$ 59.82	

During 2009, 2008 and 2007, the Company granted an aggregate of 380,123, 348,339 and 361,482 restricted share and restricted unit awards, respectively, with weighted average grant date fair values of \$57.79, \$69.25 and \$69.94, respectively. During 2009, 2008 and 2007, the aggregate fair value of restricted shares and units that vested was \$20.8 million, \$15.3 million and \$14.3 million, respectively. The aggregate intrinsic value of restricted units outstanding and exercisable at December 31, 2009 was \$18.7 million and \$1.5 million, respectively.

The issuance of share-based awards and amortization thereon has no effect on the Company's consolidated shareholders' equity.

Preferred Shares

During 2006, ACGL completed two public offerings of non-cumulative preferred shares ("Preferred Shares"). On February 1, 2006, \$200.0 million principal amount of 8.0% series A

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

non-cumulative preferred shares ("Series A Preferred Shares") were issued with net proceeds of \$193.5 million and, on May 24, 2006, \$125.0 million principal amount of 7.875% series B non-cumulative preferred shares ("Series B Preferred Shares") were issued with net proceeds of \$120.9 million. The net proceeds of the offerings were used to support the underwriting activities of ACGL's insurance and reinsurance subsidiaries. ACGL has the right to redeem all or a portion of each series of Preferred Shares at a redemption price of \$25.00 per share on or after (1) February 1, 2011 for the Series A Preferred Shares and (2) May 15, 2011 for the Series B Preferred Shares. Dividends on the Preferred Shares are non-cumulative. Consequently, in the event dividends are not declared on the Preferred Shares for any dividend period, holders of Preferred Shares will not be entitled to receive a dividend for such period, and such undeclared dividend will not accrue and will not be payable. Holders of Preferred Shares will be entitled to receive dividend payments only when, as and if declared by ACGL's board of directors or a duly authorized committee of the board of directors. Any such dividends will be payable from the date of original issue on a non-cumulative basis, quarterly in arrears. To the extent declared, these dividends will accumulate, with respect to each dividend period, in an amount per share equal to 8.0% of the \$25.00 liquidation preference per annum for the Series A Preferred Shares and 7.875% of the \$25.00 liquidation preference per annum for the Series B Preferred Shares. The Company paid \$25.8 million in 2009, 2008 and 2007 to holders of the Preferred Shares. At December 31, 2009, the Company had declared an aggregate of \$3.3 million of dividends to be paid to holders of the Preferred Shares. Certain executive officers and directors of the Company own less than 1% of the aggregate outstanding Preferred Shares.

16. Retirement Plans

For purposes of providing employees with retirement benefits, the Company maintains defined contribution retirement plans. Contributions are based on the participants' eligible compensation. For 2009, 2008 and 2007, the Company expensed approximately \$16.8 million, \$19.6 million and \$15.4 million, respectively, related to these retirement plans.

17. Statutory Information

The Company's insurance and reinsurance subsidiaries are subject to insurance and/or reinsurance laws and regulations in the jurisdictions in which they operate. These regulations include certain restrictions on the amount of dividends or other distributions available to shareholders without prior approval of the insurance regulatory authorities.

Bermuda

Under The Insurance Act 1978, as amended, and related regulations of Bermuda (the "Insurance Act"), Arch Re Bermuda, the Company's Bermuda reinsurance and insurance subsidiary, is registered as a Class 4 insurer and is required to annually prepare and file statutory financial statements and a statutory financial return with the Bermuda Monetary Authority ("BMA"). The Insurance Act also requires Arch Re Bermuda to maintain minimum share capital of \$1.0 million, to meet minimum liquidity ratios and a minimum solvency margin equal to the greatest of (A) \$100 million, (B) 50% of net premiums written (being gross premiums written less any premiums ceded by Arch Re Bermuda but Arch Re Bermuda may not deduct more than 25% of gross premiums when computing net premiums written), and (C) 15% of net discounted aggregated losses and loss expense provisions and other insurance reserves. At December 31, 2009 and 2008, such requirements were met.

Arch Re Bermuda is also required to file a new risk based capital model called the Bermuda Solvency Capital Requirement ("BSCR") model that measures risks and determines enhanced capital

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

requirements and a target capital level (defined as 120% of the enhanced capital requirements). In addition, all Class 4 Bermuda insurers must prepare and file with the BMA audited GAAP basis annual financial statements, which must be made publicly available. Declarations of dividends from retained earnings and distributions from additional paid-in-capital are subject to these requirements being met. For all applicable periods presented herein, Arch Re Bermuda satisfied these requirements

At December 31, 2009 and 2008, as determined under Bermuda law, Arch Re Bermuda had statutory capital of \$2.23 billion and \$2.21 billion, respectively, and statutory capital and surplus of \$4.26 billion and \$3.34 billion, respectively. Such amounts include interests in U.S. insurance and reinsurance subsidiaries. Arch Re Bermuda recorded statutory net income of \$940.3 million, \$349.8 million and \$909.1 million for 2009, 2008 and 2007, respectively. The primary difference between net income and capital and surplus presented under Bermuda statutory accounting principles and net income and shareholder's equity presented in accordance with U.S. GAAP relates to deferred acquisition costs.

The Bermuda Companies Act 1981 (the "Companies Act") limits Arch Re Bermuda's ability to pay dividends and distributions to shareholders if there are reasonable grounds for believing that: (a) Arch Re Bermuda is, or would after the payment be, unable to pay its liabilities as they become due; or (b) the realizable value of Arch Re Bermuda's assets would thereby be less than the aggregate of its liabilities and its issued share capital and share premium accounts. Under the Insurance Act, Arch Re Bermuda is restricted with respect to the payment of dividends. Arch Re Bermuda is prohibited from declaring or paying in any financial year dividends of more than 25% of its total statutory capital and surplus (as shown on its previous financial year's statutory balance sheet) unless it files, at least seven days before payment of such dividends, with the Bermuda Monetary Authority an affidavit stating that it will continue to meet the required margins. In addition, Arch Re Bermuda is prohibited, without prior approval of the Bermuda Monetary Authority, from reducing by 15% or more its total statutory capital, as set out in its previous year's statutory financial statements. Accordingly, Arch Re Bermuda can pay approximately \$1.07 billion to ACGL during 2010 without providing an affidavit to the Bermuda Monetary Authority, as discussed above.

Ireland

The Company's Ireland subsidiary, Arch Re Europe, was licensed and authorized by the Irish Financial Services Regulatory Authority ("IFSRA") as a non-life reinsurer in October 2008 and as a life reinsurer in November 2009. Irish authorized reinsurers, such as Arch Re Europe, are also subject to the general body of Irish laws and regulations including the provisions of the Companies Acts 1963-2006. Arch Re Europe must file and submit its annual audited financial statements and related reports to the Registrar of Companies ("Registrar") under the Companies Acts 1963-2006 together with an annual return of certain core corporate information. Changes to core corporate information during the year must also be notified to the Registrar. These requirements are in addition to the regulatory returns required to be filed annually with IFSRA. Arch Re Europe is required to maintain reserves, particularly in respect of underwriting liabilities and a solvency margin as provided for in the European Communities (Reinsurance) Regulations, 2006, related guidance and the European Communities Insurance Accounts Regulations, 1996. Assets constituting statutory reserves must comply with certain principles including obligations to secure sufficiency, liquidity, security, quality, profitability and currency matching of investments. Statutory reserves must be actuarially certified annually.

Under Irish company law, Arch Re Europe is permitted to make distributions only out of profits available for distribution. A company's profits available for distribution are its accumulated, realized profits, so far as not previously utilized by distribution or capitalization, less its accumulated, realized

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

losses, so far as not previously written off in a reduction or reorganization of capital duly made. Further, IFSRA has powers to intervene if a dividend payment were to lead to a breach of regulatory capital requirements.

United States

The Company's U.S. insurance and reinsurance subsidiaries file financial statements prepared in accordance with statutory accounting practices prescribed or permitted by insurance regulators. Statutory net income and statutory surplus, as reported to the insurance regulatory authorities, differ in certain respects from the amounts prepared in accordance with GAAP. The main differences between statutory net income and GAAP net income relate to deferred acquisition costs and deferred income taxes. In addition to deferred acquisition costs and deferred income tax assets, other differences between statutory surplus and GAAP shareholder's equity are unrealized appreciation or decline in value of investments and non-admitted assets.

Combined statutory surplus of the Company's U.S. insurance and reinsurance subsidiaries was \$850.5 million and \$766.0 million at December 31, 2009 and 2008, respectively. The Company's U.S. insurance and reinsurance subsidiaries had combined statutory net income of \$74.5 million, \$46.2 million and \$42.2 million for 2009, 2008 and 2007, respectively.

The Company's U.S. insurance and reinsurance subsidiaries are subject to insurance laws and regulations in the jurisdictions in which they operate. The ability of the Company's regulated insurance subsidiaries to pay dividends or make distributions is dependent on their ability to meet applicable regulatory standards. These regulations include restrictions that limit the amount of dividends or other distributions, such as loans or cash advances, available to shareholders without prior approval of the insurance regulatory authorities. Dividends or distributions, if any, made by the Company's U.S. regulated insurance and reinsurance subsidiaries to non-insurance affiliates would result in an increase in available capital at Arch-U.S., the Company's U.S. holding company, which is owned by Arch Re Europe and a related holding company, which are subsidiaries of Arch Re Bermuda.

United Kingdom

The Company's European insurance operations are conducted on two platforms: Arch Insurance Company Europe and Arch Syndicate 2012 (collectively, the insurance operations are referred to as "Arch Insurance Europe"). Arch Insurance Company Europe was licensed and authorized by the Financial Services Authority ("FSA") to underwrite all classes of general insurance in the U.K. in May 2004. In April 2009, the Company received approval in principle from the Lloyd's Franchise Board and the FSA to establish a managing agent and syndicate at Lloyd's of London. Arch Underwriting at Lloyd's Ltd is the managing agent of Arch Syndicate 2012 and is responsible for the daily management of Arch Syndicate 2012. The operations of AUAL and related Arch Syndicate 2012 and its corporate member, Arch Syndicate Investments Ltd, are subject to the byelaws and regulations made by (or on behalf of) the Council of Lloyd's, and requirements made under those byelaws.

Arch Insurance Europe must file annual audited financial statements in accordance with United Kingdom Generally Accepted Accounting Principles ("U.K. GAAP") with Companies House under the Companies Act 1985 (as amended). In addition, Arch Insurance Europe is required to file regulatory returns with the FSA, which regulates insurance and reinsurance companies operating from the U.K. The financial statements required to be submitted to Companies House form the basis for the regulatory return required to be submitted to the FSA. The FSA's capital adequacy and solvency regulations require a margin of capital to be determined by the Company's own individual capital

Table of Contents

**ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

assessment ("ICA") to value capital adequacy. The model the company uses to determine the capital requirement is reviewed and approved by the FSA who then issue an individual capital guidance ("ICG"). For Arch Insurance Europe, the ICG is the same as its own ICA.

Under U.K. law, all U.K. companies are restricted from declaring a dividend to their shareholders unless they have "profits available for distribution." The calculation as to whether a company has sufficient profits is based on its accumulated realized profits minus its accumulated realized losses. U.K. insurance regulatory laws do not prohibit the payment of dividends, but the FSA requires that insurance companies maintain certain solvency margins and may restrict the payment of a dividend by Arch Insurance Europe. Dividends or distributions, if any, made by Arch Insurance Company Europe would result in an increase in available capital at Arch Re Europe, a subsidiary of Arch Re Bermuda. Shareholder's equity of Arch Insurance Europe under U.K. GAAP at December 31, 2009 was £67.2 million, or approximately \$108.5 million, compared to £58.2 million, or approximately \$83.7 million, at December 31, 2008. Arch Insurance Europe had U.K. GAAP net income of £2.5 million, or approximately \$4.0 million, for 2009, compared to £0.5 million, or approximately \$0.7 million, for 2008 and £2.8 million, or approximately \$5.6 million, for 2007.

18. Legal Proceedings

The Company, in common with the insurance industry in general, is subject to litigation and arbitration in the normal course of its business. As of December 31, 2009, the Company was not a party to any litigation or arbitration which is expected by management to have a material adverse effect on the Company's results of operations and financial condition and liquidity.

19. Subsequent Events

From January 1 to February 23, 2010, the Company repurchased 2.1 million common shares for an aggregate purchase price of \$146.9 million. Since the inception of the share repurchase program through February 23, 2010, the Company has repurchased 24.0 million common shares for an aggregate purchase price of \$1.66 billion. At February 23, 2010, \$844.6 million of repurchases were available under the share repurchase program.

Table of Contents

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

20. Unaudited Quarterly Financial Information

Following is a summary of quarterly financial data:

	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
2009 Income Statement Data:				
Net premiums written	\$ 519,087	\$ 727,308	\$ 693,854	\$ 822,863
Net premiums earned	\$ 708,538	\$ 734,385	\$ 699,258	\$ 700,564
Fee income	894	826	817	925
Other income	5,428	5,687	4,950	3,951
Net investment income	93,551	100,213	100,485	95,882
Equity in net income (loss) of investment funds accounted for using the equity method	32,391	69,119	75,890	(9,581)
Net realized gains (losses)	89,901	70,638	(11,793)	(5,164)
Net impairment losses recognized in earnings	(4,493)	(4,643)	(20,863)	(36,134)
Losses and loss adjustment expenses	(410,360)	(444,914)	(398,858)	(400,542)
Acquisition expenses	(120,549)	(122,739)	(123,814)	(126,458)
Other operating expenses	(105,985)	(99,743)	(99,294)	(87,116)
Interest expense	(7,015)	(6,001)	(5,712)	(5,712)
Net foreign exchange gains (losses)	9,051	(19,755)	(53,658)	25,205
Income tax expense	(195)	(2,205)	(8,818)	(9,490)
Net income	291,157	280,868	158,590	146,330
Preferred dividends	(6,461)	(6,461)	(6,461)	(6,461)
Net income available to common shareholders	\$ 284,696	\$ 274,407	\$ 152,129	\$ 139,869
Net income per common share data				

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Basic	\$	4.96	\$	4.56	\$	2.52	\$	2.32
Diluted	\$	4.75	\$	4.39	\$	2.43	\$	2.24

2008 Income

Statement Data:

Net premiums written	\$	615,574	\$	692,692	\$	686,118	\$	811,342
----------------------	----	---------	----	---------	----	---------	----	---------

Net premiums earned	\$	698,514	\$	733,031	\$	705,675	\$	708,234
Fee income		1,456		944		1,238		1,068
Other income		211		3,067		4,968		4,036
Net investment income		111,745		117,022		117,120		122,193

Equity in net income (loss) of investment funds accounted for using the equity method		(174,147)		(1,731)		19,583		(22,313)
---	--	-----------	--	---------	--	--------	--	----------

Net realized gains (losses)		(27,704)		(23,001)		(1,920)		48,686
-----------------------------	--	----------	--	----------	--	---------	--	--------

Net impairment losses recognized in earnings		(75,169)		(82,533)		(10,749)		(12,711)
--	--	----------	--	----------	--	----------	--	----------

Losses and loss adjustment expenses		(490,816)		(548,886)		(404,625)		(404,417)
-------------------------------------	--	-----------	--	-----------	--	-----------	--	-----------

Acquisition expenses		(123,231)		(133,413)		(119,226)		(114,639)
----------------------	--	-----------	--	-----------	--	-----------	--	-----------

Other operating expenses		(100,385)		(95,652)		(102,578)		(97,187)
--------------------------	--	-----------	--	----------	--	-----------	--	----------

Interest expense		(6,285)		(6,241)		(5,788)		(5,524)
------------------	--	---------	--	---------	--	---------	--	---------

Net foreign exchange gains (losses)		51,479		68,395		298		(23,587)
-------------------------------------	--	--------	--	--------	--	-----	--	----------

Income tax (expense) benefit		(2,179)		1,849		(5,253)		(7,956)
------------------------------	--	---------	--	-------	--	---------	--	---------

Net income (loss)		(136,511)		32,851		198,743		195,883
-------------------	--	-----------	--	--------	--	---------	--	---------

Preferred dividends		(6,461)		(6,461)		(6,461)		(6,461)
---------------------	--	---------	--	---------	--	---------	--	---------

Net income (loss) available to common shareholders	\$	(142,972)	\$	26,390	\$	192,282	\$	189,422
--	----	-----------	----	--------	----	---------	----	---------

Net income (loss) per common share data

Basic	\$	(2.38)	\$	0.44	\$	3.05	\$	2.90
Diluted	\$	(2.38)	\$	0.42	\$	2.92	\$	2.78

F-64

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES

**SUMMARY OF INVESTMENTS
OTHER THAN INVESTMENTS IN RELATED PARTIES
(U.S. dollars in thousands)**

December 31, 2009

	Cost or Amortized Cost (1)	Estimated Market Value	Amount at Which Shown in the Balance Sheet
Fixed maturities and fixed maturities pledged under securities lending agreements (2):			
Corporate bonds	\$ 3,047,625	\$ 3,134,088	\$ 3,134,088
U.S. government and government agencies	1,557,955	1,553,672	1,553,672
Mortgage backed securities	1,481,760	1,449,382	1,449,382
Commercial mortgage backed securities	1,162,362	1,185,799	1,185,799
Municipal bonds	915,993	957,752	957,752
Non-U.S. government securities	718,069	752,215	752,215
Asset backed securities	554,351	567,844	567,844
Total	9,438,115	9,600,752	9,600,752
TALF investments, at market value	250,265	250,265	250,265
Other investments (3)	85,707	95,374	95,374
Short-term investments and short-term investments pledged under securities lending agreements (2)	574,462	575,483	575,483
Total investments (3), (4)	\$ 10,348,549	\$ 10,521,874	\$ 10,521,874

- (1) Investments in fixed maturities and short-term investments are shown at amortized cost.
- (2) In securities lending transactions, the Company receives collateral in excess of the market value of the fixed maturities and short-term investments pledged under securities lending agreements. For purposes of this table, the Company has excluded the \$207.0 million of collateral received and reinvested and included the \$212.8 million of "Fixed maturities and short-term investments pledged under securities lending agreements, at market value."
- (3) Excludes the Company's investment in Aeolus LP, which is accounted for using the equity method.
- (4) Includes certain securities transactions entered into but not settled at the balance sheet date. Net of such amounts, total investments at market value were approximately \$10.6 billion. Excludes \$391.9 million of investment funds accounted for using the equity method. In applying the equity method, these investments are initially recorded at cost and are subsequently adjusted based on the Company's proportionate share of the net income or loss of the funds (which include changes in the market value of the underlying securities in the funds). Changes in the carrying value of such investments are recorded as 'Equity in net income (loss) of investment funds accounted for using the equity method' rather than as an unrealized gain or loss component of accumulated other comprehensive

income in shareholders' equity as are changes in the carrying value of the Company's other fixed income investments.

S-1

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
CONDENSED FINANCIAL INFORMATION OF REGISTRANT

Balance Sheet
(Parent Company Only)
(U.S. dollars in thousands, except share data)

	December 31,	
	2009	2008
Assets		
Investments in wholly owned subsidiaries	\$ 4,707,466	\$ 3,825,396
Short-term investments available for sale, at market value	21,020	8,960
Cash	4,670	7,874
Other assets	4,330	4,394
Total Assets	\$ 4,737,486	\$ 3,846,624
Liabilities		
Senior notes	\$ 300,000	\$ 300,000
Revolving credit agreement borrowings	100,000	100,000
Accounts payable and other liabilities	14,137	13,659
Total Liabilities	414,137	413,659
Shareholders' Equity		
Non-cumulative preferred shares (\$0.01 par value, 50,000,000 shares authorized, issued: 13,000,000)	130	130
Common shares (\$0.01 par value, 200,000,000 shares authorized, issued: 2009, 54,761,678; 2008, 60,511,974)	548	605
Additional paid-in capital	578,336	994,585
Retained earnings	3,605,809	2,693,239
Accumulated other comprehensive income (loss), net of deferred income tax	138,526	(255,594)
Total Shareholders' Equity	4,323,349	3,432,965
Total Liabilities and Shareholders' Equity	\$ 4,737,486	\$ 3,846,624

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
CONDENSED FINANCIAL INFORMATION OF REGISTRANTStatement of Income
(Parent Company Only)
(U.S. dollars in thousands)

	Years Ended December 31,		
	2009	2008	2007
Revenues			
Net investment income	\$ 0	\$ 506	\$ 1,185
Net realized gains		1,084	206
Total revenues	0	1,590	1,391
Expenses			
Operating expenses	31,007	29,249	31,560
Interest expense	22,815	23,838	22,093
Total expenses	53,822	53,087	53,653
Loss before income taxes	(53,822)	(51,497)	(52,262)
Income tax benefit			
Loss before equity in net income of wholly owned subsidiaries	(53,822)	(51,497)	(52,262)
Equity in net income of wholly owned subsidiaries	930,767	342,463	910,205
Net income	876,945	290,966	857,943
Preferred dividends	(25,844)	(25,844)	(25,844)
Net income available to common shareholders	\$ 851,101	\$ 265,122	\$ 832,099

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
CONDENSED FINANCIAL INFORMATION OF REGISTRANTStatement of Cash Flows
(Parent Company Only)
(U.S. dollars in thousands)

	Years Ended December 31,		
	2009	2008	2007
Operating Activities			
Net income	\$ 876,945	\$ 290,966	\$ 857,943
Adjustments to reconcile net income to net cash provided by operating activities:			
Equity in net income of wholly owned subsidiaries	(930,767)	(342,463)	(910,205)
Net realized gains		(1,084)	(206)
Share-based compensation	5,588	7,587	9,063
Dividends received from subsidiary	530,408	537,050	602,050
Net change in other assets and liabilities	970	(145)	12,645
Net Cash Provided By Operating Activities	483,144	491,911	571,290
Investing Activities:			
Net (purchases) sales of short-term investments	(12,060)	20,909	(22,540)
Capital contributed to subsidiaries		(100,000)	
Purchase of furniture, equipment and other	(8)		(30)
Net Cash Used For Investing Activities	(12,068)	(79,091)	(22,570)
Financing Activities:			
Purchases of common shares under share repurchase program	(458,402)	(513,130)	(537,066)
Proceeds from common shares issued, net	9,966	21,881	13,498
Revolving credit agreement borrowings		100,000	
Proceeds from subsidiaries for share-based compensation		4,516	
Preferred dividends paid	(25,844)	(25,844)	(25,844)
Net Cash Used For Financing Activities	(474,280)	(412,577)	(549,412)
Increase (decrease) in cash	(3,204)	243	(692)
Cash beginning of year	7,874	7,631	8,323
Cash end of year	\$ 4,670	\$ 7,874	\$ 7,631

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
SUPPLEMENTARY INSURANCE INFORMATION
(U.S. dollars in thousands)

	Deferred Acquisition Costs, Net	Reserves for Losses and Adjustment Expenses	Unearned Premiums	Net Premiums Earned	Net Investment Income (1)	Net Losses and Loss Adjustment Expenses Incurred	Amortization of Deferred Acquisition Costs	Other Operating Expenses (2)	Net Premiums Written
December 31, 2009									
Insurance	\$ 206,866	\$ 5,093,796	\$ 1,109,283	\$ 1,688,519	NM	\$ 1,139,415	\$ 238,261	\$ 281,340	\$ 1,704,284
Reinsurance	73,506	2,779,616	324,048	1,154,226	NM	515,259	255,299	80,567	1,058,828
Total	\$ 280,372	\$ 7,873,412	\$ 1,433,331	\$ 2,842,745	NM	\$ 1,654,674	\$ 493,560	\$ 361,907	\$ 2,763,112
December 31, 2008									
Insurance	\$ 147,134	\$ 4,818,219	\$ 946,461	\$ 1,675,089	NM	\$ 1,194,528	\$ 224,539	\$ 288,883	\$ 1,657,603
Reinsurance	148,058	2,848,738	580,221	1,170,365	NM	654,216	265,970	78,421	1,148,123
Total	\$ 295,192	\$ 7,666,957	\$ 1,526,682	\$ 2,845,454	NM	\$ 1,848,744	\$ 490,509	\$ 367,304	\$ 2,805,726
December 31, 2007									
Insurance	\$ 146,455	\$ 4,301,647	\$ 1,028,785	\$ 1,702,343	NM	\$ 1,077,769	\$ 201,703	\$ 276,388	\$ 1,717,548
Reinsurance	143,604	2,790,805	737,096	1,242,307	NM	566,401	278,828	81,059	1,184,388
Total	\$ 290,059	\$ 7,092,452	\$ 1,765,881	\$ 2,944,650	NM	\$ 1,644,170	\$ 480,531	\$ 357,447	\$ 2,901,936

(1) The Company does not manage its assets by segment and, accordingly, net investment income is not allocated to each underwriting segment. See Note 3.

(2) Certain other operating expenses relate to the Company's corporate and other segment (non-underwriting). Such amounts are not reflected in the table above. See Note 3.

Table of Contents

SCHEDULE IV

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
REINSURANCE
(U.S. dollars in thousands)

	Gross Amount	Ceded to Other Companies (1)	Assumed From Other Companies (1)	Net Amount	Percentage of Amount Assumed to Net
Year Ended December 31, 2009					
Premiums					
Written:					
Insurance	\$ 2,427,027	\$ (807,843)	\$ 85,100	\$ 1,704,284	5.0%
Reinsurance	17	(35,112)	1,093,923	1,058,828	103.3%
Total	\$ 2,427,044	\$ (829,819)	\$ 1,165,887	\$ 2,763,112	42.2%

Year Ended December 31, 2008					
Premiums					
Written:					
Insurance	\$ 2,385,790	\$ (833,316)	\$ 105,129	\$ 1,657,603	6.3%
Reinsurance	17	(53,780)	1,201,886	1,148,123	104.7%
Total	\$ 2,385,807	\$ (863,350)	\$ 1,283,269	\$ 2,805,726	45.7%

Year Ended December 31, 2007					
Premiums					
Written:					
Insurance	\$ 2,563,011	\$ (942,754)	\$ 97,291	\$ 1,717,548	5.7%
Reinsurance	1,891	(333,257)	1,515,754	1,184,388	128.0%
Total	\$ 2,564,902	\$ (1,238,207)	\$ 1,575,241	\$ 2,901,936	54.3%

- (1) Certain amounts included in the gross premiums written of each segment are related to intersegment transactions and are included in the gross premiums written of each segment. Accordingly, the sum of gross premiums written for each segment does not agree to the total gross premiums written as shown in the table above due to the elimination of intersegment transactions in the total. For 2009, 2008 and 2007, the insurance segment results include \$1.1 million, \$1.9 million and \$1.0 million, respectively, of gross premiums written and assumed through intersegment transactions. For 2009, 2008 and 2007, the reinsurance segment results include \$12.0 million, \$21.8 million and \$36.8 million, respectively, of gross premiums written and assumed through intersegment transactions. See Note 3.

Table of Contents

SCHEDULE VI

ARCH CAPITAL GROUP LTD. AND SUBSIDIARIES
SUPPLEMENTARY INFORMATION FOR PROPERTY AND CASUALTY INSURANCE UNDERWRITERS
(U.S. dollars in thousands)

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J	Column K	
Affiliation with Registrant Insurance	Deferred Acquisition Costs, Net	Reserves for Losses and Adjustments	Discount, if any, deducted in Column C	Unearned Premiums	Net Premiums Earned	Net Investment Income (1)	Net Losses and Loss Adjustment Expenses Incurred Related to		Amortization of Deferred Acquisition Costs	Net Paid Losses and Adjustments	Net Premiums Written
							(a) Current Year	(b) Prior Years			
Insurance											
2009	\$ 206,866	\$ 5,093,796	\$ 6,151	\$ 1,109,283	\$ 1,688,519	NM	\$ 1,186,475	\$ (47,060)	\$ 238,261	\$ 865,894	\$ 1,704,284
2008	147,134	4,818,219	4,904	946,461	1,675,089	NM	1,273,482	(78,954)	224,539	739,976	1,657,603
2007	146,455	4,301,647	2,081	1,028,785	1,702,343	NM	1,090,423	(12,654)	201,703	603,156	1,717,548
Reinsurance											
2009	\$ 73,506	\$ 2,779,616		\$ 324,048	\$ 1,154,226	NM	\$ 657,400	\$ (142,141)	\$ 255,299	\$ 573,196	\$ 1,058,828
2008	148,058	2,848,738		580,221	1,170,365	NM	885,432	(231,216)	265,970	519,898	1,148,123
2007	143,604	2,790,805		737,096	1,242,307	NM	739,108	(172,707)	278,828	514,257	1,184,388

- (1) The Company does not manage its assets by segment and, accordingly, net investment income is not allocated to each underwriting segment. See Note 3.

Table of Contents**EXHIBIT INDEX**

Exhibit Number	Description
3.1	Memorandum of Association of Arch Capital Group Ltd. ("ACGL") (l)
3.2	Bye-Laws of ACGL (l)
3.3.1	Form of Amended and Restated Bye-law 45 and Bye-law 75 (p)
3.3.2	Form of Amended and Restated Bye-law 20 (r)
4.1.1	Certificate of Designations of Series A Non-Cumulative Preferred Shares (ii)
4.1.2	Certificate of Designations of Series B Non-Cumulative Preferred Shares (mm)
4.2.1	Specimen Common Share Certificate (n)
4.2.2	Specimen Series A Non-Cumulative Preferred Share Certificate (ii)
4.2.3	Specimen Series B Non-Cumulative Preferred Share Certificate (mm)
4.3	Shareholders Agreement, dated as of November 20, 2001, by and among ACGL and the shareholders party thereto, conformed to reflect amendments dated as of January 3, 2002, March 15, 2002 and September 16, 2002 (u)
4.4	Subscription Agreement, dated as of October 24, 2001, by and among ACGL and the purchasers party thereto, conformed to reflect amendments dated as of November 20, 2001, January 3, 2002, March 15, 2002 and January 20, 2003 ("Subscription Agreement") (u)
4.5	Agreement, dated as of January 27, 2004, by and among ACGL and the parties thereto, relating to the Subscription Agreement (w)
4.6	Indenture and First Supplemental Indenture, dated as of May 4, 2004, between ACGL and JPMorgan Chase Bank, N.A. (formerly JPMorgan Chase Bank) ("JPMCB") (x)
10.1.1	Lease Agreement, dated as of September 26, 2002, between Arch Insurance Company ("Arch Insurance") and BFP One Liberty Plaza Co. LLC ("BFP") ("Lease") (u)
10.1.2	First Lease Modification Agreement, dated as of May 7, 2003, to the Lease (v)
10.1.3	Second Lease Modification Agreement, dated as of July 31, 2003, to the Lease (v)
10.1.4	Third Lease Modification Agreement, dated as of February 18, 2004, to the Lease (w)
10.1.5	Fourth Lease Modification Agreement, dated as of May 13, 2004, to the Lease (gg)
10.1.6	Fifth Lease Modification Agreement, dated as of December 15, 2005, to the Lease (jj)
10.1.7	Sixth Lease Modification Agreement, dated as of March 29, 2007, to the Lease (ss)
10.1.8	Sublease Agreement relating to the Lease between Arch Insurance and BFP, dated as of July 21, 2008 (yy)
10.1.9	Eighth Lease Modification Agreement, dated as of November 17, 2009, to the Lease (filed herewith)
10.2	Lease Agreement, dated as of July 22, 2008, between M-C Plaza II & II L.L.C. and Arch Insurance (yy)
10.3.1	ACGL 1995 Long Term Incentive and Share Award Plan ("1995 Stock Plan") (b)
10.3.2	First Amendment to the 1995 Stock Plan (c)
10.4	ACGL 1999 Long Term Incentive and Share Award Plan (g)
10.5.1	ACGL Long Term Incentive Plan for New Employees ("2001 Plan") (q)
10.5.2	First Amendment to the 2001 Plan (zz)
10.6.1	ACGL 2002 Long Term Incentive and Share Award Plan ("2002 Plan") (t)
10.6.2	First Amendment to the 2002 Plan (v)
10.6.3	Second Amendment to the 2002 Plan (yy)
10.7	Second Amended and Restated ACGL Incentive Compensation Plan (yy)
10.8	ACGL 2007 Long Term Incentive and Share Award Plan (oo)
10.9.1	ACGL 2007 Employee Share Purchase Plan ("2007 ESPP") (oo)
10.9.2	Amendment to ACGL 2007 ESPP, dated as of November 7, 2007 (ss)
10.10.1	Restricted Share Agreements with ACGL Executive Officers of ACGL September 19, 1995 grants (d)

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

- 10.10.2 Restricted Share Agreements with ACGL Marc Grandisson October 23, 2001 grant (o), February 26, 2004 grant (bb), September 22, 2004 grant (y) and November 15, 2005 grant (jj)
- 10.10.3 Restricted Share Agreement with ACGL W. Preston Hutchings July 1, 2005 grant (jj)
- 10.10.4 Restricted Share Agreements with ACGL Louis T. Petrillo January 30, 2001 grant (o), February 20, 2003 grant (w) and September 22, 2004 grant (y)
- 10.10.5 Restricted Share Agreements with ACGL Constantine Iordanou January 1, 2002 grant (p), February 26, 2004 grant (bb) and September 22, 2004 grant (y)
- 10.10.6 Restricted Share Agreements with ACGL John D. Vollaro January 18, 2002 grant ("January Restricted Share Agreement") (s), February 20, 2003 grant (w), Amendment No. 1 to January Restricted Share Agreement (u) and September 22, 2004 grant (y)
- 10.10.7 Restricted Share Agreement with ACGL substantially in the form signed by Constantine Iordanou, John D. Vollaro and Marc Grandisson May 11, 2007 grants (ss)
- 10.10.8 Restricted Share Agreement with ACGL substantially in the form signed by W. Preston Hutchings and Louis T. Petrillo May 11, 2007 grants (ss)
- 10.10.9 Restricted Share Unit Agreement Constantine Iordanou February 20, 2003 grant ("February RSU Agreement") (w), First Amendment to February RSU Agreement December 9, 2008 grant (yy) and Second Amendment to February RSU Agreement July 9, 2009 grant (bbb)
- 10.10.10 Restricted Share Unit Agreement with ACGL substantially in the form signed by each of Constantine Iordanou, John D. Vollaro, Marc Grandisson, W. Preston Hutchings, Mark D. Lyons and Louis T. Petrillo May 9, 2008 grants (ww)
- 10.10.11 Restricted Share Unit Agreement with ACGL Mark D. Lyons May 9, 2008 grant (ww) and May 6, 2009 grant (filed herewith)
- 10.10.12 Agreement, dated as of September 17, 2003, between ACGL and John D. Vollaro (w)
- 10.10.13 Restricted Share Agreements with ACGL substantially in the form signed by the Non-Employee Directors of ACGL 2003 annual grants (aa), 2004 annual grants (z), 2005 annual grants (ss) and 2008 annual grants (yy)
- 10.10.14 Restricted Share Agreements with ACGL substantially in the form signed by Constantine Iordanou, John D. Vollaro and Marc Grandisson February 23, 2006 grants (nn)
- 10.10.15 Restricted Share Agreements ACGL substantially in the form signed by W. Preston Hutchings and Louis T. Petrillo February 23, 2006 grants (nn)
- 10.10.16 Restricted Share Agreement with ACGL John C.R. Hele April 1, 2009 grant (zz)
- 10.10.17 Restricted Share Agreements with ACGL substantially in the form signed by each of Constantine Iordanou, John C.R. Hele, John D. Vollaro, Louis T. Petrillo, W. Preston Hutchings and Marc Grandisson May 6, 2009 grants (filed herewith)
- 10.11.1 Stock Option Agreements with ACGL Executive Officers of ACGL 1995 and 1996 grants (d), 1997 and 1998 grants (f) and 2000 grants (m)
- 10.11.2 Amendments to Stock Option Agreements with ACGL Executive Officers and Directors of ACGL May 5, 2000 (n)
- 10.11.3 Stock Option Agreements with ACGL Non-Employee Directors of ACGL initial grants (f) (i), 1996 and 1997 annual grants (c), 1998 annual grants (e), 1999 annual grants (f), 2000 annual grants (i) and 2001 annual grants (n)
- 10.11.4 Stock Option Agreements with ACGL Louis T. Petrillo January 30, 2001 grant (o), October 23, 2001 grant (o) and September 22, 2004 grant (y) (ee)
- 10.11.5 Stock Option Agreements with ACGL Marc Grandisson October 23, 2001 grant (o), September 22, 2004 grant (y) (ee) and November 15, 2005 (jj)
- 10.11.6 Stock Option Agreement, dated July 1, 2005, between ACGL and W. Preston Hutchings (jj)
- 10.11.7 Amended and Restated Stock Option Agreement, dated as of October 23, 2001, between ACGL and Paul Ingrey (u)

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

- 10.11.8 Stock Option Agreements with ACGL John M. Pasquesi October 23, 2001 grant (p)
- 10.11.9 Stock Option Agreements with ACGL Constantine Iordanou January 1, 2002 grant (p) and September 22, 2004 grant (y) (ff)
- 10.11.10 Stock Option Agreements with ACGL John D. Vollaro January 18, 2002 grant (s) and September 22, 2004 grant (y) (ff)
- 10.11.11 Stock Option Agreements with Constantine Iordanou, John D. Vollaro and Marc Grandisson February 23, 2006 grants (nn)
- 10.11.12 Stock Option Agreements with W. Preston Hutchings and Louis T. Petrillo February 23, 2006 grants (nn)
- 10.11.13 Stock Option Agreement with John C.R. Hele April 1, 2009 grant (zz)
- 10.12.1 Share Appreciation Right Agreement with ACGL substantially in the form signed by Louis T. Petrillo and W. Preston Hutchings May 11, 2007 grants (ss)
- 10.12.2 Share Appreciation Right Agreement with ACGL substantially in the form signed by Constantine Iordanou, John D. Vollaro and Marc Grandisson May 11, 2007 grants (ss)
- 10.12.3 Share Appreciation Right Agreement with ACGL substantially in the form signed by each of Constantine Iordanou, John D. Vollaro, Marc Grandisson, W. Preston Hutchings, Mark D. Lyons and Louis T. Petrillo May 9, 2008 grants (yy)
- 10.12.4 Share Appreciation Right Agreement with ACGL substantially in the form signed by each of Constantine Iordanou, John C.R. Hele, Marc Grandisson, W. Preston Hutchings, Mark D. Lyons, John D. Vollaro and Louis T. Petrillo May 6, 2009 grant (filed herewith)
- 10.13 Employment and Change in Control Agreement, dated as of May 5, 2000, between ACGL and Louis T. Petrillo (k) and Amendment to Change in Control Agreement, dated as of December 31, 2008 (yy)
- 10.14 Employment Agreement, dated as of October 23, 2001, among ACGL, Arch Re Bermuda and Marc Grandisson (p), First Amendment to same, dated as of November 16, 2005 (jj) and Second Amendment to same, dated as of November 24, 2008 (yy)
- 10.15 Employment Letter Agreement, dated as of May 29, 2005, between ACGL and W. Preston Hutchings (hh) and Amendment to same, dated as of May 21, 2008 (uu)
- 10.16 Employment Agreement, dated as of November 28, 2007 between ACGL and Constantine Iordanou (rr) and Amendment to same, dated as of December 31, 2008 (yy)
- 10.17 Employment Agreement, dated as of October 27, 2008, between ACGL and John D. Vollaro (vv)
- 10.18 Employment Agreement, dated as of December 2, 2008, between ACGL and Paul Ingrey (yy)
- 10.19 Employment Agreement, dated as of October 22, 2008, between ACGL and John C.R. Hele (vv)
- 10.20 Employment Agreement, dated as of August 1, 2006, between Arch Insurance Group Inc. and Mark D. Lyons (yy) and Amendment to same, dated as of November 24, 2008 (yy)
- 10.21 Assumption of Change in Control Agreements (n)
- 10.22 ACGL 1995 Employee Stock Purchase Plan (a)
- 10.23 Arch Capital Group (U.S.) Inc. ("Arch U.S.") Executive Supplemental Non-Qualified Savings and Retirement Plan (yy)
- 10.24 Asset Purchase Agreement, dated as of January 10, 2000, by and among Arch U.S., Folksamerica Holding Company, Inc. ("FHC") and Folksamerica (h)
- 10.25 Transfer and Assumption Agreement, dated May 5, 2000, between Arch Reinsurance Company (formerly Risk Capital Reinsurance Company) ("Arch Re U.S.") and Folksamerica (j)
- 10.26 Escrow Agreement, dated December 28, 2000, by and among ACGL, FHC, Folksamerica and the Escrow Agent (n)
- 10.27 Agreement, dated May 5, 2000, by and among Arch U.S., Arch Re U.S., FHC and Folksamerica regarding Aviation Business (l)

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

- 10.28 Agreement and Plan of Merger, dated as of September 25, 2000, by and among Arch U.S., ACGL, The Arch Purpose Trust and Arch Merger Corp. (l)
- 10.29 Agreement, dated November 20, 2001, by and among ACGL, Warburg Pincus Private Equity VIII, L.P., Warburg Pincus International Partners, L.P., Warburg Pincus Netherlands International Partners I, C.V., Warburg Pincus Netherlands International II, C.V. and HFCP IV (Bermuda), L.P. (collectively, the "Original Signatories") and Orbital Holdings, Ltd. (p)
- 10.30 Agreement, dated November 20, 2001, by and among ACGL, the Original Signatories and Insurance Private Equity Investors, L.L.C. (p)
- 10.31 Agreement, dated November 20, 2001, by and among ACGL, the Original Signatories and Farallon Capital Partners, L.P., Farallon Capital Institutional Partners II, L.P., Farallon Capital Institutional Partners III, L.P. and RR Capital Partners, L.P. (p)
- 10.32 Agreement, dated as of November 8, 2001, by and among ACGL, the Original Signatories, Trident, Trident II, L.P., Marsh & McLennan Risk Capital Holdings, Ltd., Marsh & McLennan Capital Professionals Fund, L.P. and Marsh & McLennan Employees' Securities Company, L.P. (o)
- 10.33 Management Subscription Agreement, dated as of October 24, 2001, between ACGL and certain members of management (o)
- 10.34.1 Second Amended and Restated Credit Agreement, dated as of August 30, 2006 ("Second Amended and Restated Credit Agreement"), by and among ACGL, Arch U.S., Arch Reinsurance Ltd. ("Arch Re Bermuda"), Arch Reinsurance Company, Arch Insurance Company, Arch Specialty Insurance Company, Arch Excess & Surplus Insurance Company, Arch Indemnity Insurance Company (formerly Western Diversified Casualty Insurance Company) and Arch Insurance Company (Europe) Limited, with Barclays Bank Plc, The Bank of New York, Calyon, New York Branch, Citibank, N.A., ING Bank N.V., London Branch, Lloyd's TSB Bank plc, and Wachovia Bank, N.A., as documentation agents, Bank of America, N.A., as syndication agent, JPMCB, as administrative agent, and the lenders named therein (mm)
- 10.34.2 First Amendment to the Second Amended and Restated Credit Agreement, dated as of October 1, 2007 (pp)
- 10.34.3 Second Amendment to the Second Amended and Restated Credit Agreement, dated as of June 26, 2009 (aaa)
- 10.35.1 Letter of Credit and Reimbursement Agreement, dated as of December 12, 2007 ("Lloyds TSB Agreement"), Arch Re Bermuda, Lloyds TSB Bank plc, as agent ("Lloyds TSB"), Lloyds TSB, ING Bank N.V., London Branch, and Barclays Bank plc, as original lenders, and Lloyds TSB as mandated lead arranger (rr)
- 10.35.2 Amendment to Lloyds TSB Agreement, dated as of June 26, 2009 (aaa)
- 10.36 Master Reimbursement Agreement, dated as of November 6, 2009, between Citibank Europe PLC and Arch Re Bermuda (filed herewith)
- 10.37.1 Stock Purchase Agreement, dated as of May 13, 2004, by and among Protective Underwriting Services, Inc. ("Protective"), Arch Capital Holdings Ltd. ("Arch Capital Holdings") and ACGL, as amended by Amendment No. 1, dated as of July 9, 2004, Amendment No. 2, dated as of July 13, 2004, Amendment No. 3, dated as of July 16, 2004 and Amendment No. 4, dated as of July 28, 2004 (bb)
- 10.37.2 Waiver Letter Agreement related to the Stock Purchase Agreement, dated as of October 5, 2004, signed by Arch Capital Holdings, ACGL and Protective (cc)
- 10.38 Joint Venture Agreement, dated as of January 22, 2008, between Gulf Investment Corporation GSC and Arch Re Bermuda relating to Gulf Holdings Limited (tt) (xx)
 - 12 Statement regarding computation of ratios (filed herewith)
 - 21 Subsidiaries of Registrant (filed herewith)
 - 23 Consent of PricewaterhouseCoopers LLP (filed herewith)
 - 24 Power of Attorney (filed herewith)

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

- 25 Form T-1 Statement of Eligibility of Trustee (dd)
 - 31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
 - 31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
 - 32.1 Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
 - 32.2 Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
-

- (a) Filed as an exhibit to our Registration Statement on Form S-8 (No. 33-99974), as filed with the SEC on December 4, 1995, and incorporated by reference.
- (b) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 1995, as filed with the SEC on March 29, 1996, and incorporated by reference.
- (c) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 1996, as filed with the SEC on March 31, 1997, and incorporated by reference.
- (d) Filed as an exhibit to our Report on Form 10-Q for the period ended June 30, 1997, as filed with the SEC on August 14, 1997, and incorporated by reference.
- (e) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 1997, as filed with the SEC on March 27, 1998, and incorporated by reference.
- (f) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 1998, as filed with the SEC on March 30, 1999, and incorporated by reference.
- (g) Filed as an exhibit to our Definitive Proxy Statement, as filed with the SEC on April 14, 1999, and incorporated by reference.
- (h) Filed as an exhibit to our Report on Form 8-K as filed with the SEC on January 18, 2000, and incorporated by reference.
- (i) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 1999, as filed with the SEC on March 30, 2000, and incorporated by reference.
- (j) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on May 19, 2000, and incorporated by reference.
- (k) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on September 8, 2000, and incorporated by reference.
- (l) Filed as an annex to our Definitive Proxy Statement/Prospectus included in our Registration Statement on Form S-4 (No. 333-45418), as filed with the SEC on September 26, 2000, and incorporated by reference.
- (m) Filed as an exhibit to our Report on Form 10-Q for the period ended September 30, 2000, as filed with the SEC on November 14, 2000, and incorporated by reference.
- (n) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2000, as filed with the SEC on April 2, 2001, and incorporated by reference.
- (o) Filed as an exhibit to our Report on Form 10-Q for the period ended September 30, 2001, as filed with the SEC on November 14, 2001, and incorporated by reference.
- (p) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on January 4, 2002, and incorporated by reference.
- (q) Filed as an exhibit to our Registration Statement on Form S-8 (No. 333-72182), as filed with the SEC on January 8, 2002, and incorporated by reference.
- (r) Filed as an annex to our Definitive Proxy Statement, as filed with the SEC on June 3, 2002, and incorporated by reference.
- (s) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2001, as filed with the SEC on March 18, 2002, and incorporated by reference.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

- (t) Filed as an exhibit to our Report on Form 10-Q for the period ended June 30, 2002, as filed with the SEC on August 14, 2002, and incorporated by reference.
- (u) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2002, as filed with the SEC on March 31, 2003, and incorporated by reference.
- (v) Filed as an exhibit to our Report on Form 10-Q for the period ended September 30, 2003, as filed with the SEC on November 12, 2003, and incorporated by reference.
- (w) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2003, as filed with the SEC on March 10, 2004, and incorporated by reference.
- (x) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on May 7, 2004, and incorporated by reference.
- (y) Form of agreement filed as an exhibit to our Report on Form 8-K, as filed with the SEC on September 28, 2004, and incorporated by reference.
- (z) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on October 6, 2004, and incorporated by reference.
- (aa) Filed as an exhibit to our Report on Form 10-Q for the period ended March 31, 2004, as filed with the SEC on May 10, 2004, and incorporated by reference.
- (bb) Filed as an exhibit to our Report on Form 10-Q for the period ended June 30, 2004, as filed with the SEC on August 9, 2004, and incorporated by reference.
- (cc) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on October 8, 2004, and incorporated by reference.
- (dd) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on May 3, 2004, and incorporated by reference.
- (ee) Revised form of agreement originally filed as an exhibit to our Report on Form 8-K, as filed with the SEC on September 28, 2004, and incorporated by reference.
- (ff) Revised form of agreement originally filed as an exhibit to our Report on Form 8-K, as filed with the SEC on September 28, 2004, and incorporated by reference.
- (gg) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2004, as filed with the SEC on March 15, 2005, and incorporated by reference.
- (hh) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on June 9, 2005, and incorporated by reference.
- (ii) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on February 2, 2006, and incorporated by reference.
- (jj) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2005, as filed with the SEC on March 13, 2006, and incorporated by reference.
- (kk) Filed as an exhibit to our Report on Form 10-Q for the period ended March 31, 2006, as filed with the SEC on May 8, 2006, and incorporated by reference.
- (ll) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on August 31, 2006, and incorporated by reference.
- (mm) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on May 24, 2006, and incorporated by reference.
- (nn) Filed as an exhibit to our Report on Form 10-Q for the period ending September 30, 2006, as filed with the SEC on November 9, 2006, and incorporated by reference.
- (oo) Filed as an appendix to our Definitive Proxy Statement, as filed with the SEC on April 3, 2007, and incorporated by reference.
- (pp) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on October 2, 2007, and incorporated by reference.
- (qq) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on December 3, 2007, and incorporated by reference.
- (rr) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on December 14, 2007, and incorporated by reference.

Edgar Filing: ARCH CAPITAL GROUP LTD. - Form 10-K

Table of Contents

- (ss) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2007, as filed with the SEC on February 29, 2008, and incorporated by reference.
- (tt) Filed as an exhibit to our Report on Form 10-Q for the period ending March 31, 2008, as filed with the SEC on May 8, 2008, and incorporated by reference.
- (uu) Filed as an exhibit to our Report on Form 10-Q for the period ending June 30, 2008, as filed with the SEC on August 8, 2008, and incorporated by reference.
- (vv) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on October 28, 2008, and incorporated by reference.
- (ww) Filed as an exhibit to our Report on Form 10-Q for the period ending September 30, 2008, as filed with the SEC on November 10, 2008, and incorporated by reference.
- (xx) Pursuant to 17 CFR 240.24 b-2, confidential information has been omitted and filed separately with the SEC.
- (yy) Filed as an exhibit to our Annual Report on Form 10-K for the year ended December 31, 2008, as filed with the SEC on March 2, 2009, and incorporated by reference.
- (zz) Filed as an exhibit to our Report on Form 10-Q for the period ending March 31, 2009, as filed with the SEC on May 11, 2009, and incorporated by reference.
- (aaa) Filed as an exhibit to our Report on Form 8-K, as filed with the SEC on June 29, 2009, and incorporated by reference.
- (bbb) Filed as an exhibit to our Report on Form 10-Q for the period ending September 30, 2009, as filed with the SEC on November 9, 2009, and incorporated by reference.
Management contract or compensatory plan or arrangement.

E-7
